

The Canadian Journal of Medicine and Surgery

A JOURNAL PUBLISHED MONTHLY IN THE INTEREST OF
MEDICINE AND SURGERY

VOL. XIV.

TORONTO, OCTOBER, 1903.

NO. 4.

Original Contributions.

THE MEDICAL EXPERT AS A WITNESS.*

BY W. R. RIDDELL, ESQ., K.C., TORONTO.

Mr. Chairman and Members of the Medical Profession,— You will allow me to say, in the first place, that I decline to look upon myself as an entire stranger in a gathering of medical men and women. True it is I do not have the honor of being a doctor of medicine, nor do I practise medicine (for which I duly offer up thanksgiving every day of my life), but I had the good fortune during my earlier years to study medicine for a short time in the same office as my friend, Dr. Powell; and that has given me an interest in medical subjects and in medical men which I have never lost, and which I trust I never shall lose.

The very interesting paper of Dr. McKenzie, and the still more interesting discussion which followed, struck me as I sat on the platform as furnishing a strong illustration of what Herbert Spencer and the evolutionists call differentiation, and the advance and evolution from the homogeneous to the heterogeneous. Now, when I studied medicine there was no such difficulty about diphtheria as there is now. The diagnosis, the treatment, the prognosis were perfectly simple. (Laughter.) If the neighbors' children had a sore throat and died, and my child had a sore throat, then it was diphtheria. If they had not died of sore throat, then it was not diphtheria. The treatment, too, was perfectly simple. Once a case is diagnosed as diphtheria—take a stick about six inches long with a piece of cotton rag more or less clean (they had no antiseptic or aseptic methods in those

* Address delivered at the meeting of Ontario Medical Association, Toronto, June, 1903.

days) tied around one end of the stick, and make it tight with thread, No. 30 preferred; dip that into a solution of nitrate of silver and swab out the throat. That was the treatment, and the only treatment. Prognosis, too, was certain. (Laughter.) Repeat that treatment. If the child gets better, it probably will not die. (Laughter.) If it takes a turn for the worse and dies, then the case is hopeless. (Laughter and applause.) There were no cultures in those days. They had beef tea, indeed, but it was used for feeding the patient, not the bacteria. They had nothing in the way of incubators and the like that you put into your waist-coat pockets, or into the axilla of the patient in order to develop bacteria. There was then no difference of opinion as to diagnosis, treatment, prognosis. Now, I see no two medical men seem to be able to agree except on this point: "If you get a really costly medicine, the more of it you administer the better the result." (Laughter and applause.)

Like my friend, Dr. McKenzie, when I was asked to read a paper before this Association I had some little difficulty in coming to a conclusion as to what kind of paper would probably answer your requirements best. As, however, I had already, at the request of the Medical Faculty of the University of Toronto, prepared a series of lectures for the medical students upon the subject of "Medical Men in Court," I thought it might not be out of place to take part of one of these lectures, change it somewhat, and adapt it to the "meaner capacity," as the Shorter Catechism has it, and give you that. That will account for the didactic tone which I propose to use. You will please consider yourselves students who are sitting at the feet of Gamaliel and learning from him.

In the English language the adjective has three degrees of comparison: The positive, the comparative, and the superlative. The noun substantive, with the exception of a very few words, has nothing of the kind. One of these exceptions is the useful and expressive word "liar." There are three kinds of liars:—there is the liar, the d—d liar, and the expert witness. (Laughter and applause.) Now, that gibe, that proverb, derives most of its vogue from the medical witness. And there is a modicum of truth concealed in it although when one considers what it means, and what it implies and considers what a medical witness, as a rule is, it will be found to be grossly extravagant and grossly unjust.

There are two kinds of witnesses: the common witness, who speaks as a matter of fact; the expert witness, who speaks as to a matter of opinion; and when we remember that an expert witness is only such when he is speaking as to a matter of opinion,

and that in the case of opinions there are, and always have been and always will be, differences, it is not at all wonderful that expert witnesses do not agree in their testimony.

Concerning opinions there is constant disputing; and it is not doctors alone who are constantly disputing. Take the clergy: the *odium theologicum* is worse than the *odium medicum*, and the *odium forensecum*, and both of these, God knows, are bad enough. The clergy of one church believe that the theology of another church is based upon error, and they know that the opinions of the clergy of that other church are wrong. Members of my church know that they are right, and the other fellows are all wrong. Orthodoxy is my doxy; heterodoxy is your doxy. Lawyers do not agree, even when they are put on the Bench. Occasionally a lawyer is put on the Bench; it is not always the case, but still those who are lawyers are put there. (Laughter.) I have in my mind more than one case of pure law, not matters of fact at all, but matters of opinion, where one court has given a verdict for the plaintiff, this has been reversed by the next court, that again reversed, and then in the Supreme Court this last was again reversed. The only reason, perhaps, this was not reversed again was because there was no other court to go to. Politicians—people generally—do not agree in their opinions. Over there in the adjoining Park in the Legislative Assembly this afternoon they will be discussing a matter of opinion, and if you will give me a list of the people who are going to vote, if you tell me their names, I will tell you the majority on one side or the other. Opinions must necessarily differ, and therefore it is that the expert witness who is called upon to swear, not to a matter of fact at all, but to a matter of opinion, almost as a matter of course, differs from another expert witness.

Now, you will say that I am travelling very wide from my subject, but that is not really so, as I hope to be able to show you in a few minutes. What is the object of a court? What is the witness in the box for? What are courts of justice kept up for? They are kept up for determining facts, in the first place, and then applying the law to those facts so found; the judge applies the law, the facts are found by a jury, or by a judge sitting instead of a jury—and I shall for convenience use the word "jury" instead of judge sitting for a jury. The facts so to be found by the jury are not to be found by them from their own knowledge. In the jury box, as everywhere else, one is entitled to use common knowledge, that is, what everybody is supposed to know. Everybody is supposed to know that we have night and day, there are seven days in the week, that water is wet and fire will burn, and that when medical men get together at dinner they have a

good time. (Laughter.) I won't say anything further on the latter matter, lest it might lead to painful misapprehensions. (Laughter.) A jurymen or a judge has no right to found a verdict upon his own knowledge of facts. He determines the facts upon the evidence given in the witness box and by the witnesses; and therefore it is that the witness is probably the most important man in the court of justice after all, although you will find difficulty in convincing the unhappy litigant of that.

What is the object of cross-examination? It is to determine two things. The object ultimately is the truth, and that is determined in two ways: finding out first of all how near the witness is trying to tell the truth, and secondly, how far he is worthy of belief even if he is trying to tell the truth. Now, both of these two matters must be considered. A man may be perfectly truthful, telling what he believes to be the exact truth, and by reason of his want of capacity, or by reason of some idiosyncrasy, which can only be determined by careful investigation, he is not succeeding in telling the truth.

Again, the value of the evidence of a witness depends upon a number of things. In the first place, it depends upon the opportunity which the witness has had to investigate the matters concerning which he is giving evidence. This is the case with the common witness as well as the expert witness. I have heard medical men swear (I have never heard medical men say it outside of the witness box) that a man who has examined a patient once will have as good an idea of the extent of his injuries, and the probabilities of his making a rapid recovery, as the man who has been with him from the time the injury took place, who has waited upon him, prescribed for him over and over again, who has joyed over him when he has shown signs of recovery, and whose heart has gone down as his patient's health has gone down. However that may be, the means of observation which a witness has is the first thing of importance. The second thing is his capacity to observe, his capacity to form an opinion, his capacity to understand what he sees. That is a matter largely of education and of experience. Again, the value of the testimony depends upon a man's memory—how accurate is a person? how retentive is his memory? does he remember what he thinks he remembers? Is it the fact that he is telling the truth concerning something that has taken place in the past? Another thing is his capacity to say what he means. You may think that is an extraordinary statement; it is not. No man who has been much in a court of justice but will agree with me in this. Not one man in twenty appreciates the value of an accurate use of the English language. Not one man in twenty can express exactly what he means so that

there cannot be any mistake about what he does mean. The capacity to express one's thoughts, the ability to put in words and in decent English what it is desired to convey, is another thing upon which the value of a witness's testimony depends.

Another thing is his honesty. Medical witnesses are generally honest. The medical man who will allow himself to be approached, and who will give evidence contrary to fact or contrary to his real opinion, for the purpose of enabling the plaintiff to get a larger verdict out of a railway company is as much a thief, is as much a criminal, and should be behind the bars just as truly, as a man who opens a bank with dynamite. (Applause.)

Now, the object of cross-examination is to determine how far is the man's testimony to be relied upon, how far is what he is stating the actual fact. I remember once defending a man and woman for murder. A very graphic description was given by a young girl about thirteen or fourteen years of age of a whole series of circumstances, which she detailed so well and vividly that one could see that they led to an irresistible conclusion, that the man and woman in the dock were guilty of murder. I cross-examined at some length and with some care. Her story wavered. Each time we approached the story from a different point of view it charred. One little circumstance was modified, and little contradictions began to appear. By a little careful leading, or perhaps by a good deal of careful leading, she began contradicting her story in important points. Before the cross-examination was through she had contradicted her whole story, and that not by inadvertence, but of intention. She had yielded to the suggestion of the stronger mind. She had been living for three months in the home of a well-known enemy of the prisoners. The judge discharged the prisoners, and would not allow the matter to go to the jury. I was asked by a clergyman ten minutes after the acquittal, "How could you get that girl to lie the way she did; did you think it was honest or right to ask her those questions?" I answered, "Yes, eternally so." He said, "Why! you knew she was telling what was not true?" "Yes, but I wanted the jury to see that girl had a mind of such a character as to yield to the suggestion of a stronger mind—that she would allow to be instilled into her brain thoughts which had never been there, and thoughts which ought not to be there, thus showing that she was easily influenced." Then, taking the fact that she had been in the house of a well-known enemy of the accused for two or three months, the danger of allowing such evidence to procure a conviction was obvious.

I say, cross-examination is one of the most valuable of weapons for arriving at the truth, and I speak of it because there

is, at the present time, a feeling in some quarters against cross-examination. Take some of those very papers which are now crying out against cross-examination, and let anybody charge them with libel; and let that person be put in the witness box in order to give evidence against them, and they will be the very first person to say, "It is the duty of a counsel to test in every possible way how far the witness is trying to tell the truth, and how far the witness is succeeding in telling the truth." Of course, this will lead to inquiry into matters apparently irrelevant, but all proper cross-examination is directed to the sifting of opportunity, capacity, honesty.

Now, a witness has two duties. I suppose that probably will be news to you. I do not think you will find this in any of the books of medical jurisprudence. I don't think you will find it in any book of any kind—but I am not a man of theory, I am a man of practice. My profession calls upon me, and I am employed to get verdicts, if I can; that is my life-work, and I propose to get verdicts by every honorable means, and I don't care one rap for theory. Your books tell you the witness has got only one duty, that is, to stand up there and tell the truth. That is grossly wrong. I have heard witnesses tell the truth in the witness box and nobody believed them. A witness has more than one duty. In addition to actually telling the truth, a witness owes it to himself and to his position to tell the truth in such a way that the jury and spectators will believe him. Your text-books tell you, "Go into the witness box and answer the questions truly, and then leave the witness box secure in the approval of your own conscience." I say, however, that not only should a witness tell the truth, but he should tell the truth in such a way as that people will believe him—and that, after all, is the main object of a witness—to say something which will be believed and have an effect upon the verdict.

Now, that leads me a little further. A witness box is no place for frivolity. A witness box is no place for jesting or trifling. The man who has taken an oath to tell the truth is under a serious obligation, and that obligation he ought to have in his mind before he goes into the witness box. Those are commonplace, perhaps, to you, but none the less they are exceedingly important. If a man is going to be a witness, it is his duty to prepare himself by finding out all the facts concerning which he is likely to be asked. An expert witness who is going to be asked about his opinion ought to prepare himself with authorities backing up his opinion; he ought to be in a position to justify his opinion to the very utmost, because if the cross-examining lawyer is worth his salt that opinion may be severely tested. Physical

preparation is not out of place. An important medical witness being cross-examined by a lawyer who understands his business, has a physical strain put upon him which is not light. The lawyer feels it, but it is his business, he is at it every day, but the witness has an unaccustomed physical strain, and therefore one going into the witness box ought to see to it that he is as far as possible physically fit. One's personal appearance is not unimportant. The man who is decently and properly dressed will receive more consideration at the hands of the judge, and at the hands of the jury, than the fop, or the sloven. The medical profession never stood higher in the estimation of the people than when they had their distinctive garb of the furred robe, the cap, and with this the gold-headed cane. The judges are wise in their day and generation when they insist on lawyers wearing the gown and being properly clothed in court. The rule of old Polonius still stands good:

“ Costly thy habit as thy purse can buy,
But not expressed in fancy; rich, not gaudy:
For the apparel oft proclaims the man.”

These are preparations, things you consider before you go into the witness box; matters which will, or may, bear upon the value of your testimony. They won't help you to tell the truth, but none of them will hurt you in the slightest degree. All will assist you in that important matter, *i.e.*, making the truth tell.

Then in the witness box I have been in the habit of laying down for solicitors rules which will look almost absurd to you when I mention them, but rules which in themselves have a wide usefulness, and ought to be borne in mind by every witness. One-third of the time of trial courts is taken up with perfectly useless blather—not only useless in itself, but doing harm in beclouding proper evidence, in belittling the other parts of the case which ought to receive attention. Now, while judges sometimes, and lawyers oftener, are responsible for that, to a great extent witnesses are also responsible for that in no few cases.

First, do not answer a question until you understand it. Now, that seems silly. Go into a court room and listen to a trial; you will find witnesses persist in answering something they are not asked, and in not answering what they are asked. If in the witness box you do not understand the question, or if the question is complicated, you have a right to have the question put in such a shape as that you do understand it, and to have it put in such a shape as that you can answer it without deviating from the strict line of truth. If the lawyer declines (and there are men who will decline), you have a right to appeal to the judge, and it is the judge's duty to see to it that the question is put in

such a way as is understandable, and that it may be fairly answered.

In the second place, when you do thoroughly understand the question, answer it as briefly and concisely as you can consistently with the truth. If a question can be answered "Yes" or "No," answer it "Yes" or "No." If it cannot be answered "Yes" or "No," refuse to answer it "Yes" or "No." (Applause.) It is a well-known trick in my profession to insist, with a great air of indignation, upon a direct answer to a direct question. Of course, that is simply "talkee-talkie" for the jury. Sometimes the witness yields to the insistence of the counsel and answers "Yes" or "No," when he feels and knows no such answer should be given. This is wrong. If a question cannot be answered "Yes" or "No," you have a right to appeal to the judge, and almost invariably the judge will put things right. Do not, however, be hypercritical. The counsel for the side upon which you have been summoned as a witness will give you ample opportunity to explain your answer, and frequently the judge will say, "Answer the question. You will have an opportunity to explain." Insist on this opportunity.

Thirdly, and a more important rule than either of the others: when you get through answering a question, shut up. (Applause and laughter.) Men will talk and talk and talk, and the more they talk the better the cross-examining counsel likes it, because it is absolutely certain if a man keeps his mouth wide open long enough, he is going to put his foot in it. (Laughter.) In my experience I have seen more cases lost (I mean incidental matters) by witnesses going on talking after they had finished their answer to the question than by anything else. If the lawyer understands his business you may be sure he will ask questions enough. If you answer all the questions he will put to you, you will be doing all the law calls upon you to do, and enough to pay for all the remuneration you get. I have been asked: What should you do supposing a question should be put in such a way as that any answer to it would be misleading? Say so. You have rights as well as the cross-examining counsel, and your rights are bound to be respected. Say, "I cannot answer that question in a way that will convey the proper impression." Have the question put in such a way that you can answer it. These three simple rules seem probably almost like baby talk, but if they were observed at least one-third of the time taken up in our courts would be saved, and at least one-half of the humiliation and mental pain which witnesses experience, both before and especially after they leave the witness box would be prevented.

Don't despise the cross-examining counsel. Poor chap! he

may not know the difference between a heart and a liver if he were to see them. He may know nothing of medicine generally, but if he is worth his salt, and if he is doing honest work for the fee that is paid to him—I withdraw that—promised him—(laughter)—he will know as much about the subject for the time being as you do. Don't despise him; he is in a different line of business, but if he is a first-class man, he will, for the time being, know his subject; and if he is anything like a first-class man he will at least make the jury believe he knows more than you do about it.

Don't get into jangles. Don't cross swords in the way of wit with the counsel. That is our play, what we are after. Give me the witness that will jest with me, particularly the expert witness, and in nine cases out of ten he will give me what I want. If the cross-examining counsel laughs at you he has either got you on the hip, or you have hit him hard. (Laughter.) If he laughs at you, then as a rule you have got him, but if he laughs with you, you might as well leave the witness box.

I have seen cases lost by witnesses being too smart. I have in my mind now a case (I think there is at least one gentleman in this hall who will remember it) where a medical witness, called for the defence, used the word "imagination" in reference to the diagnosis of one of the medical witnesses called for the other side. Plaintiff's counsel knew that was all he wanted. Of course at once he was glowingly indignant at the idea of a member of a liberal and learned profession talking about another member of that profession using his imagination. It was perfectly useless for that medical man to say that he was using the word "imagination" in Tyndall's sense, "the scientific use of the imagination." The jury did not know Tyndall, and did not want to. All they knew was that one medical man ventured to say another medical man was imagining things, and promptly gave a verdict for the plaintiff.

Another medical man of the highest standing had the effect of his evidence absolutely destroyed when he admitted to me in the witness box that he was an advocate. It was perfectly useless for the gentleman to say that when he used the word "advocate" he meant an advocate for the truth. The jury knew well what an advocate was. That he was a lawyer employed and paid to speak upon one side.

Don't go and talk outside of the question, and "don't get gay."

Now, Mr. Chairman and gentlemen, I have talked already longer than I intended. I have been trying to say to you something practical, and these are not "Counsels of perfection." I

know medical witnesses who, under cross-examination (while I daresay they never heard of any such rules as these I have been speaking of), have followed exactly the spirit of these rules, and as though they had them in mind. Any medical man who respects himself, and is willing to do what is right, need have no fear of his position in the witness box under cross-examination if, first, he understands his business; secondly, he takes pains to prepare himself; and thirdly, he is willing to tell the truth.

Gentlemen, I thank you very heartily for your kindness and the honor you have conferred upon me. If anything I have said will in the slightest degree assist you in the future, I am more than repaid. (Applause.)

THE COUNTRY DOCTOR.*

BY JAMES S. SPRAGUE, M.D., STIRLING, ONT.,
Author of "Medical Ethics and Cognate Subjects," etc.

THERE is no composition in music which so pleurably affects the soul of man as that termed a medley, provided such include selections (although not classical according to modern ideas) that we heard in earlier days; those dear old melodies, such as our mothers were accustomed to sing, and our fathers delighted to hear. The memory of the good old times is awakened thereby. The present moments freed from despondency, less dismal do they appear, and the future made fair and bright, and projects of pith and moment seem to have no barriers towards being consummated, or hopes and future achievements to lose their brilliant coloring.

Brief sketches in medical literature or other writings serve equally to give us a pleasurable and instructive hour when relaxation is sought, often demanded, by us, who have bared our breasts and kissed the rod in the endeavor to show to our patients "conclusively and clearly, that Death is a stupid blunder merely, and not a necessity of our lives."

With these metaphors or similitudes as introductory, it would appear as desirable that for our title "Medical Medley" were better, for there are those who prefer that we designate or distinguish ourselves not as doctors, but physicians, clinicians, practitioners, practicians, therapeutists, and other highly elaborated names, which philologic research does not in every particular claim or clearly sanction. Therefore, "The Country Doctor" as our headlight for this paper will remain, and our authority for its adoption is, that the title of Doctor of Medicine was first given in 1324 by the University of Astio, in Italy.

It is admitted that he who selects to write these segments from the swirl of "time and tide," should be one of those whose aspirations, virtues and impulses he has studied many years. The same ambitions that possess the soul of the recent graduate, are such as we held in early days.

They have not, however well planned, been realized in many instances; the prizes have been few, the blanks have been too numerous, illustrating too forcibly that

"Our wills and fates do so contrary run,
That our devices still are overthrown,
Our thoughts are ours, their end none of our own."

* Address delivered at the meeting of the Canadian Medical Association, London, August 26th, 1903.

The country doctor is he whose early life was that of the country or village. As a rule he is the best gift of a highly honored and self-respecting family of sturdy yeomen, especially chosen to give honor to his name and family, and to be the equal in merit and nobility of the family doctor who lives in a nearby village. Such are the incentives which arouse the young man. An experience of a few years as a Public School teacher enables him to be self-reliant and to develop personality, really an egotism. Such preparatory work is rivalled only by attendance during a few years, or better still, the full course of years required for the degree of bachelor in arts or in science. Self-reliant, methodical, really sober in judgment, self-respectful and studious, fearless and tireless, is he; he should be set apart for medicine is the opinion of the family doctor, and the die is cast.

The "pale, sickly and pious" brother is evidently called to serve the Lord. Both bend their necks to the yokes as easily as they contracted croup in early life.

This introduction of the future spiritual adviser or

"Leader of faithful souls, and Guide
Of all who travel to the sky,"

is employed to serve as an illustration of the life-work of these brothers, whose lives are directly associated with the people, whose lives in consequence of this co-mingling or association are recognized as chief factors in the advancement and maintenance of sanitation and morality. The future clerical personage has been presented as pale, sickly, and pious. Such an assertion is not applicable nor desired, although too commonly believed as worthy of this definition. No profession calls for greater vigor or moral worth than he, who is to assist the country doctor, should possess; co-workers in many enterprises, in fact, for the wrongs that need resistance, or causes that need assistance, are those of the highly-educated clergy. The poorly educated among such men (and such are too numerous) are the enemies of progress, in fact, our enemies. Some one has said: "Such minds having no living message for any one, they are merely speaking tubes through which the past comes down to us. God help those who have to rely on what they have to give."

This world with its sunshine and flowers; God's Word in the stars; the progressive development of man's goodness; abundant evidences of increasing philanthropy and practical benevolence are too seldom announced from the pulpit. Too much of his eloquence is employed to preserve moss-covered creeds and dogmas, apparently too full of crudities and cruelties. Shorn of such tendencies, this "vir pietate gravis," this co-worker of ours,

would help more noticeably in the progress of civilization, and more and more would our professions conduce to each other's interests—not only to our interests, but to those of the dear people whose servants we are.

Should not such a friendship and mutual and uplifting interest exist between us as held by Nisus and Euryalus, or Pylades and Orestes? If so, the saying, "where three medical men are assembled, two of them are atheists," would be untenable or incapable of proof.

The preparation for the long-sought-for degree of doctor in medicine having been fulfilled, our young doctor, thoroughly disciplined thereby, advances to the footlights. The whole profession in some respects, and those in his field of labor, act as the audience. His destiny is to see that "Life's a varied light illusion, joy and sunshine, light and shadow," and that no illiberal thought or motive should characterize his doings. He learns and has been taught it, at least (if he has been properly taught) that catholicity reigns supreme in medicine, that whatever is administered as best is the best, our only limitations in regard to therapeutics being the sun, the air, the earth and the fulness thereof. Such is the liberality of our profession. While upholding, yes, venerating, the honored teachings of Hippocrates, Celsus, Galen, Eristatus, Heraphilus, Heraclides—not unmindful of the labors of Boerhaave, Cullen, and of others not less illustrious, whose services are memorable—our young doctor, contrasted with his brother, the clergyman, is free to accept or reject such teachings and yet be termed regular in practice. He learns and is learning constantly that his mission on earth is a struggle, an unceasing progressive struggle to find truths—medical truths—and to live by them. It is his to have the "keen spirit which seizes the prompt occasion, makes the thought start with instant action, and at once plans and performs, resolves and executes." To him his profession is, and ever will prove, a philosophy which never has rested and never can rest. It knows no other law than that of progress. He learns too, frequently, that a point which but yesterday was invisible, is its goal to-day, and will be its starting-point to-morrow.

History reminds us that new worlds have arisen, and that we have lost old nations. Equally can the same changes be adduced in respect to the numerous theories and schools of the past ages and the introduction of new ideas, but "he who beholds the bright countenance of truth in the quiet and still air of delightful studies," and finds encouragement in the thought that some loved theory may be either abandoned or be recast, or modified, can and will ever be able to keep a warm heart in and for his profession,

and otherwise escape that condition which may justly be termed mental fossilization, a condition too frequently observed and antagonistic to the spirit of the age.

I now introduce the country doctor who, possessed of such nobility of soul, such glowing aspirations, would be able in other and more or less honored fields of labor, to advance himself to the highest and most useful point obtainable, but such is not his destiny. His work is and will be such as acquires much honor, and apart from professional services, no more useful citizen or benefactor or confidential adviser could be named. I speak as one who has full authority to make these statements, as one who, for more than three decades, has been very closely associated with such men, not only with men in this, my native province, but in early professional life with colleagues, country doctors in a far distant state. Those days were days not only of perils but of discomforts and disadvantages. Our faithful and tireless bronchos conveyed us and our saddle-bags to widely scattered homes.

"I scarce can think those days are gone,
And yet like dreams they are no more."

Those were the times in which we respected our seniors, who taught us much, not only in practice, but in ethics. Fraternal relationships then were stronger, and we well knew if consultations were necessary, that our consultant would not try to rob us of our patients. To-day the consultant has to be carefully watched in too many instances, and the newly-fledged doctor too frequently is ignorant of professional honor for his elders.

It is an admitted conviction that in our staunch adherence to a code of moral law, and in the general and intelligent honesty of our members, we, although subjected to every form of temptations, many great and constant, can find few illustrations of violation of our code or principles of ethics, or of honor. No other occupation among men offers more abundant material for development of all that is best, that is useful, and that is noblest. When it is considered that no teachings during collegiate life are given on the subject of medical ethics, it is evident that a high grade of morals has either been inherited, or has been acquired in practice by the average doctor. Although our profession is in the keeping of able men, many dangers exist, and are appearing, which threaten our best interests. While the expenses of living and the demands of our services have greatly increased, have we arranged our fee tariffs to such changes? Are we not capable of being aroused to recognize that we are becoming more and more enslaved by several widely known pharmaceutical companies?

Are we not able to note that our medical journals—fortunately not all of them—are greater friends to such companies than they are to us? Is it not time that our Provincial or State Medical Boards name such journals whose columns and advertising pages have the almanac character? While these so-called pharmaceutical companies are announcing their so-called ethical goods to us, too frequently is the poor and struggling doctor called to pay out his hard-earned money for them, and learns, probably too late, that if he had studied his *materia medica* and other works relative to this subject in preference to the price list of such companies he would have served his patients far better.

The evidences furnished that old medicines are not totally abandoned, but becoming more studied and used, are many and encouraging. Should not we possess qualifications in *materia medica* equal, if not superior, to those demanded of pharmacists? If so, is such the case? Would it not be advisable that we adhere strictly to the employment of such medicines and their compounds as are named in our standard works on medicine, and not encourage preparations praised by the pharmaceutical company and a few well-paid officials connected with medical journals? We should prepare our own tablets and compounds; if not, our local druggist can do such work, and by so doing the interests of each other would be better conserved. Opportunities for the study of qualifications of medical students in their primary work are being afforded me in the position of Examiner in *Materia Medica* and Pharmacology for our College of Physicians and Surgeons.

These reflections (or, shall I name them suggestions?) are introduced for our best consideration. Heart-to-heart talks such as I so humbly present, are what we of the country and of the walled city so earnestly need. Although "each life is an existence viewing itself too much through a single medium," it is well for us to observe that medicine is a very jealous mistress, and the most difficult of all arts to acquire, and at such annual gatherings of this association, is it not but our rights to make confession by naming our sins of omission and commission, to review the past, consider our present interests, and to make attempts to look into the glorious future. For Cicero says that questions of any importance have the past, the present, and the future to consider (*tria esse omnino genera quae in disceptationem cadere possint; quid fiat factum futurumve sit*).

The average longevity of members of our profession is stated to be fifty-six years; if so, the average working period cannot much exceed thirty years, and we will assign the first ten years to that period in which a young doctor becomes established in practice,

and if before the closing of this, the first decade—this bread and butter period, as Sir Andrew Clarke calls it—he has married brain and wealth, his future will have less clouds, for the richest doctors with whom I am acquainted are those who, like the penniless scions of nobility, believe that wealth is but a fair gift in exchange for a title in the family, and act according to such beliefs.

The country doctor is of essential interest in any community—in fact, is he not a necessity, and so regarded? The establishment of the town-pump is equally so regarded, which is maintained and kept in order, and no one appears willing or able to bear expenses in the repairs thereof. His practice is, of course, at times for the money consideration, and his considerations are (if he considers) that if the liveryman had made equal trips to his and been paid the usual livery rates, he would have been better off than he as regards shekels of gold and of silver. He eateth side pork with those who eat side pork, and drinketh milk with those who drink milk. At times he drinketh port or sherry with those who drink some variety of chosen border blends of mountain dew, whose merits he announces with no sour disdain when away from home; his breath is that of new-mown hay, or that of frankincense and myrrh. His experience during this first decade is such that he estimates it as passing the understanding of men, in payment for which he is paid principally in hay, oats, and other products of the farm. Apparently satisfied is he if he can meet his payments for drugs and medicines, and be recognized as popular; unfortunate, however, is he if ambition should tempt him to erect too costly a residence. Such a step he, like others in many similar cases, will have reason to regret.

Perchance he hears of the success of a former fellow graduate, and his ambition, too, is exercised to adopt a specialty. Such prospective work occupies much of his thoughts during idle moments, and he is the best material from which the safe specialist emanates, but it is needless to state, such a hope is very seldom realized. He becomes more fixed to his locality, and becomes a specialist in more than one department; and the second decade finds him still there apparently afraid to move, yet anxiously looking for a government appointment; in fact, any appointment wherein there is a surety of a good living. Tired out is he, worn out really in too many instances, and really when he has become experienced, and thus more useful; but, strange to state, such is not the belief of his people. They want a change, yet he is always with the dear people, and a quarter of a century passes by. Verily, the thirty-year limit is being rapidly reached, and he is having for pastime the raising of the earliest potatoes, or the biggest

beets and cucumbers; or, perhaps, reaches the presidency of the county or district cattle show, or becomes the master of the village Masonic lodge. In quiet moments he feels inspired, and is anxious to give the world—the medical world—many foolscap pages of his experience, but as those who look out of the window become darkened and desire fails, the world loses much, yet he forgets not those days when the usual "Hello, hello, doctor," was answered "All right" by him, and a few hours found him ten miles from home in the Bethel Settlement doing a successful version, and succeeding in overcoming much and protracted inertia. How pleasant was it to arrive home, wearied in body and soul, to find in reviewing his books that he succeeded so well. Inwardly he feels as if he were a god among the people. The scene changes when he hurriedly opens a note from the editor of his best medical journal, which invites his best contribution on the financial aspect of medicine, and his wife requests a few shekels to pay her subscription to the Central Asia Missionary Society. The poetry of life and the romance of medicine suddenly vanish, for he reflects that, although the laborer is worthy of his hire, his account in the Bethel Settlement has not been paid him, and the prospects of reward are not too inviting. Such thoughts do not long disturb him, for he is rushed to the third concession to do some sewing on Jim Sharp—the reaper has run away, as Whitcomb Riley describes it. He fashioneth splints from the rail fence, and taketh dinner with the men. He sayeth grace, and pronounces the pork, potatoes, and onions, and gelatinous pie equal to the best. The open cylinder threshing machine, or the more modern wind stacker, relentless, ever starved and insatiable, does some work for him ere the evening shadows fall, and before he rests he has heard confessions that would break up whole families and neighborhoods. He recommends balsamics to the deacon, and terms his disorder nephritis, yet both know better, and probably it will never be known—"Domine salve nos." These illustrations are those seen by the country doctor—the most revered, the most useful man, he who has the heart within and the God overhead impulses—"he has seen old views and patients disappearing one by one, and is entitled to a furlough for his brain and for his heart."

We cherish the memory of the old village doctor, the old country. May he ever exist.

What greater birthright can any intelligent or ambitious man claim and cherish than that his name is in the list—the long list of Æsclepiadæ, of the healers of men—a list, says Oliver Wendell Holmes, which stretches unbroken to the days of gods and demigods, until its earliest traditions blend with the story of the

brightest of the ancient divinities. Can crowned heads claim a lineage more noble? Can the Church, with its apostolic succession traditions, its lives of patriarchs, of apostles, and martyrs, claim a greater or more honored progeny? Are not such reflections, and the statements that coronets have been placed on the heads of many of our learned brethren, quite enough to fill our cup of ambition? Who then among us is not, or has not been, ambitious to be the least among them, the country doctor?

In the words of William Cullen Bryant:

“We seek not the praise of the love-written record,
The name and the date inscribed on the stone;
The things that we do, let them be our story,
Ourselves be remembered by what we have done.”

These words are equally expressed by the immortal Hufeland, and are more directly appropriate to our profession: “Thine is a high and holy office. See that thou exercise it purely, not for thine own advancement, not for thine own honor, but for the glory of God, and the good of thy neighbors. Hereafter thou wilt have to give an account of it.” The country doctor, having time for reflection, recognizes these truths amid surrounding disadvantages and trials, lights and shadows, and, like virtue, a country practice is its only reward.

SOME CLINICAL INDICATIONS FOR THE USE OF THE ELECTRIC-LIGHT BATH.*

BY T. D. CROTHERS, M.D.,

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THE use of the electric-light bath as a sudorific and tonic, or remedy for the restoration of deranged metabolism, is practically new in therapeutics. A number of experimental studies have been made in this direction with most encouraging results. The sudorific action of electric light is prominent, and evidently superior to the hot-air bath in rapidity of action and duration of effect.

How far the electric-light bath promotes healthy metabolism, destroys bacteria, and adds new force or vigor to the functional activities of the body, is yet to be determined. Hot-air baths, in nearly all forms of neuro-psychoses, have proved so valuable that further researches, with improved means and methods, give promise of most practical results.

The patients who come under my care suffer from toxic insanities due to spirits and drug-taking. They also suffer from sclerotic conditions of the heart, liver, kidney, and blood-vessels, particularly of the finer arteries. Associated with these pathological changes are various degrees of vaso-motor paralysis, organic cell changes with disturbances and palsies of co-ordination. Anemia, hyperanemia of the nervous system, and the unknown conditions described by the terms neurasthenia and cerebraesthesia, are always more or less prominent. As a remedy for these conditions, I have used the electric-light bath for over a year, giving from thirty to fifty baths a week, exclusively to spirits and drug-takers in all conditions and degrees of addiction.

The bath consists of a room five feet square and six feet high, lined with tin, on which are arranged ninety incandescent lights of sixteen-candle power. The patient, taking a bath, sits on a chair in the centre of this room with the entire body exposed to the light, the head being covered with a napkin.

It was found from experience that the action of the electric light dried out the oil in the hair, leaving it dry and husky, hence it was thought that the intense action of light would impair the growth of the hair and otherwise injure the scalp. These effects

* Read before the Electro-Therapeutic Society.

were not noticed on the hair of other parts of the body. At the beginning of the bath the temperature of the room would be about 70 F., and in the course of ten or fifteen minutes it would rise to 125 or 130, and during the one or two hours in which the baths were given, it would fluctuate between 120 and 150. The opening of the door for the exit and entrance of a new patient would vary the temperature from ten to fifteen degrees. Perspiration began after entrance to this room in from five to eight minutes, and became very profuse in from ten to fifteen minutes, the patient rarely remaining over fifteen minutes.

In most cases the duration of treatment was but ten minutes, sometimes less. Many persons perspired excessively in five or six minutes. This depends in some measure on the state of the skin. As all patients of this class have general anesthesia of the cutaneous nerves, and diminished circulation of the superficial vessels, diaphoresis is always lessened and impaired. In some instances profuse perspiration would appear in a few minutes, in others it would be slow. For the purpose of aiding this action, quantities of water were drunk before entering the bath. The first inquiry was the effect on the temperature of the body. Where the temperature was above the average, due to some toxins or some subacute inflammatory condition, there was a sharp fall of from one to two degrees, and in some instances this occurred during ten or fifteen minutes. This reduced temperature usually continued for hours or days after, and in some instances did not rise again. In other cases where the temperature was subnormal, due to unknown conditions, there was a slight rise of a degree or more.

In both these classes, it was supposed that the fluctuation in the temperature was due to the removal of the toxemias. In other examples, the temperature did not vary much, and quickly dropped back to the condition which existed at the beginning of the bath. In the so-called tobacco-heart, a condition noted by much functional disturbance, of which tachycardia and arrhythmia are the most common phases, the effects were noticeable in diminishing the irregularity, giving tone and strength to the pulse. In most cases, the heart's action increased from ten to fifteen beats, and the regularity and force of the beat was improved, and this increased action continued for hours afterwards. Where organic disease of the walls or valves existed, a marked improvement followed, particularly in the regularity and steadiness of the beat.

The respiration remained about the same, in some instances rising, in others falling. In all, it improved in steadiness. Massage with hot or cold showers were given, and the patient always retired to bed, the baths always being given early in the evening.

This would supplement and increase the good effects of the light, or neutralize any possible bad effects from it.

It is evident that two distinct effects were produced from the action of electric light in this form. First, the physiological effect. The rapid, sudoriferous action of electric light on the skin produced intense and rapid elimination, draining off the water from the blood and tissues, and with it the toxins, salts, and excrementitious matters. This in itself is a most valuable means for relieving the disordered conditions commonly present. It was found that after this sudorific effect, followed by massage and showers, a decided soporific tendency was induced. Degrees of nervous insomnia were overcome, and persons who could not sleep well before the bath, after it had profound slumber. Drug-takers, who were constantly looking for the analgesic effects of drugs, found in the bath the relief they sought. In some instances this was very marked, and lasted for one or two nights. In others it was of short duration. In all instances this was a marked result. The particular disorders which seemed most influenced by the bath were neuritis, gastritis, myalgia, and extreme nervous irritation.

Arterio-sclerosis (a very common organic disease in spirit and drug-takers) is materially changed by the light bath, as seen in the improvement of the heart's action and lowering of the arterial tension. After each bath the circulation became steadier, and the tracings by the sphygmograph more uniform. The general sclerotic condition was changed. In one instance the patient lost flesh, and gained in muscular vigor. He became intensely alarmed at his condition, and used the light bath every day for three months with marked relief.

Sclerosis of the liver and kidneys has greatly diminished in several cases, and the acute symptoms subsided through the use of the bath. In hypertrophic liver the size of the organ is perceptibly decreased after the first bath. Albumen and casts from the kidneys grow less, and finally disappear after a few baths.

All these and other conditions show marked improvements from the time of the first bath. This was so prominent in some instances, that all drug medication was withheld, and the baths were the exclusive remedy used for the time. It was evident that the electric light was the most prominent agent in producing these results, supplemented by the massage and shower. This was proved in instances where the electric bath was not used, but only massage and showers, in the different results which followed.

It was also evident in persons who took hot-air baths daily with massage and showers. A comparison of results, including the rapidity of restoration, showed that those who took the electric-light bath made a more rapid recovery, slept better, and the nutrition improved with greater rapidity.

Second, the psychological effect of the bath was especially marked. The first impression of an electric-light bath is always pleasant, because associated with a feeling of credulity as to the effects. The impressiveness of the room, and the absence of any unpleasant physical conditions, such as glare of light on the eyes, or the discomfort of breathing, with the feeling of awe and wonderment aided by the suggestions of the operator, have a very powerful influence on the mind and body. After the first bath, this confidence is deepened, and the mental suggestion of restoration from this means becomes a dominant idea, which, in addition to the physical agents used, is a most powerful tonic and restorative.

A certain hypnotic impression grows with each bath, and is largely supplemented by the actual physiological action of light on the organism. As a result, mental disturbances of all degrees, including illusions, delusions, and hallucinations, grow less and less, and finally disappear. It is evident that its use in manias and melancholias might be very beneficial, also that in marked organic diseases it will be of great value in staying the progress of the disease.

In many cases an intense mental disgust for spirits follows the bath. This grows with the vigor of the person. The exhaustion, not unfrequently noted after a hot-air bath, never follows the electric bath. This is, no doubt, due to both mental and physical influences.

These are only a few of the many indications which are traceable to the use of light. I am encouraged to believe that with new methods of application and a wider and more accurate study, its value as a therapeutic agent will come into great prominence.

GYNCOLOGICAL SURGICAL CLINIC AT THE METROPOLITAN HOSPITAL, NEW YORK.*

BY AUGUSTIN H. GOELET, M.D.,

Professor of Gynecology, New York School of Clinical Medicine.

CONSERVATIVE OÖPHORECTOMY, MYOMECTOMY AND VENTRAL SUSPENSION.

Gentlemen,—The first operation to-day is upon a patient you saw at my clinic last week. You remember she has a retroflexed uterus that is bound down by adhesions, and that there is a small mass to the left in the region of the ovary which is a small ovarian cyst. There is also a small fibroid nodule in the posterior wall of the uterus, near the fundus. The patient is forty-two years old, and has been married two years. Her life was one of comparative comfort before marriage though she suffered with occasional backache. Since her marriage, however, this has been exaggerated, and she now complains of pelvic pain, referred more particularly to the left side. I am satisfied that the displacement of the uterus is of long standing though the cyst may be of recent development.

We will begin by curetting the uterus because there is in these cases almost invariably an associated endometritis. I shall use here only the semi-sharp, copper-edged (so-called dull) curette within the cavity of the uterus, because it will remove all that should be removed without doing any damage, and the sharp curette will be used only upon the firmer structure at the internal os which could not be removed with the other instrument. Afterwards, the cavity is irrigated through a double current irrigator. For irrigation, plain sterile water, normal saline solution or a solution of Synol Soap two drams to the quart (I prefer the latter), is employed for the purpose of cleansing the cavity. When an astringent is required, I use a solution of half an ounce of the compound tincture of iodine to the quart of water, and when necessary to arrest hemorrhage the strength is doubled.

We will now proceed to open the abdomen in the median line, just above the pubes. For the work we have to do here this incision need not exceed three inches in length. The median line is followed down to the linea alba, and the abdominal wall beneath is penetrated a little to one side so as to go through the rectus

* Reported expressly for the CANADIAN JOURNAL OF MEDICINE AND SURGERY.

muscle, because this gives muscle to muscle approximation in closing the incision, and makes a much stronger line of union.

I have brought up the left ovary after freeing the adhesions binding the uterus, and you see the small cyst involves only a part of the ovarian structure. I puncture this, empty it, and resect the cyst wall completely. You observe there is considerable healthy ovarian structure remaining. The cut edges of the ovarian structure are now brought together by a continuous suture of fine catgut. This portion of ovarian tissue is well worth saving because we do not know yet the condition of the other ovary, and should it prove to be healthy now, it may become diseased later and require removal, when if she had lost the other she would be deprived of both. Conservative work upon the ovary should always be done when it is possible, without adding to the risk of the operation. The tube on this side is normal. The other ovary and tube as well are also normal.

The uterus is now seized with tenaculum forceps at its fundus, and drawn up into the wound. The small fibroid nodule which we felt before, is not large, as you see, and is apparently giving no trouble, but it increases the weight of the uterus, and should not be left to develop and cause trouble subsequently. These fibroids of whatever size should always be removed when they are encountered in this way, when the abdomen is open, though it adds to the risk of the operation, and every one that can be felt in the uterine wall should be removed, even if they encroach upon the cavity of the uterus, and it is opened into in the process of enucleation. In fact, I believe it would be better to open the abdomen expressly to remove these growths when they are small, though they may not be causing trouble, than to wait until they are larger.

The uterine wall over the tumor is incised in the direction of the long axis of the organ down to the growth, which is then, you see, easily shelled out with the handle of the scalpel. The incision in the uterine wall is then closed with a continuous suture of fine catgut. When there is much oozing from the bed left by the tumor, it is sponged out with hot normal salt solution, before inserting the sutures which close the incision.

The uterus is now suspended to the anterior abdominal wall at the lower angle of the wound. The sutures, two in number, of medium-size silk, are passed through the peritoneum and subperitoneal fascia only of the abdominal wall on each side, and through the uterine wall at the posterior aspect of the fundus, and they are inserted not more than a quarter of an inch apart so as to limit the area of attachment of the uterus to the abdominal wall. When tied, these sutures are within the peritoneal cavity, the

peritoneal margins being united over them in closing the abdominal incision.

The abdominal incision is closed by three layers of continuous suture of No. 1 catgut, one uniting the peritoneum and lower border of the muscle, a second the fascia and upper border of the muscle, and the other layer is a subcuticular suture which approximates the margins of the skin. This makes a strong line of union, and the resulting scar is only a line, with scarcely any perceptible spreading of the skin cicatrix subsequently.

CURETTAGE AND TRACHELORRHAPHY.

The next case requires only a curettage and repair of a lacerated cervix. The curettage is done in the same manner as the first case. This completed, the cervix is caught with a tenacular forceps and a traction ligature is inserted through the centre of both anterior and posterior lips of the cervix. This will prove a great convenience, and avoid the constant tearing and laceration of the cervix by a tenaculum. These traction ligatures are handled by an assistant who drags the lips apart, and exposes the angles of the laceration on each side. A tenaculum is fastened at the lower margin of the posterior lip on one side, and my cervix knife is inserted into the cicatricial plug at the angle, transfixes it, and comes out within the canal of the cervix. Pulling the knife downward, and directing its course towards the point into which the tenaculum is inserted, it cuts off a slice from the margin of the lacerated lip, and leaves a smooth, perfectly even denuded surface. The knife is reinserted at the angle, and made to cut a slice from the margin of the anterior lip. If there is still some attachment of this wedge to be removed at the angle, a few upward strokes of the knife which has a double edge will detach it.

The same thing is repeated on the other side of the cervix, and we have a perfect denudation accomplished in less than half the time required when scissors are used for this purpose, and all the cicatricial tissue has been removed.

We are now ready for the insertion of the sutures. I prefer silkworm gut for a suture material, and this has been dyed with methylene blue, so that they are more readily distinguished when we wish to remove them.

Before tying the sutures, the denuded surface is irrigated freely with hot normal salt solution, and the two lips are drawn together by the two traction ligatures which are then caught with a hemostatic forceps near their insertion, and held together so as to approximate the lips evenly. The sutures are now tied, and

care is taken not to draw the loop tight enough to constrict and cut off the circulation. The traction ligatures are now removed, and you see there has been perfect coaptation of the lips of the cervix. A uterine packing forceps is now inserted through the canal of the cervix, and the blades slightly separated to enlarge the canal and insure its patency. This serves also to relieve some of the constriction of the cervical tissue by sutures..

These cases require no attention during convalescence. It is better to omit vaginal douching as the careless insertion of the nozzle would disturb the sutures and the healing process. The sutures may be removed at any time after two weeks, but they should remain longer if union is not complete and perfect. The great objection to catgut as a suture material in these cases is that it does not last long enough, and by cutting into the tissue the loop loosens before union is complete, and permits the approximated surfaces to separate.



School Hygiene.



EYESIGHT.

PROF. MCHARDY, ophthalmic surgeon at King's College Hospital, and Professor of Ophthalmology at King's College, says: "I believe that the present kindergarten system is at the root of much of the injury caused to young children's eyes. I have studied this phase of the question, and am able to speak from experience. The continuous concentration of young eyes on colored papers and the small objects used in the infants' school-room does, I am convinced, tend to provoke short sight in a few years.

"This mischievous element can be detected not only in London, but in all large towns where young children are forced, quite unconsciously, to strain their eyes in one direction in a poor light. A little reading and a little sewing for children do no harm, but when the dose is in the slightest degree over-done, as I am convinced it is in many of our schools, then injury to vision takes place.

"Then," continues Prof. McHardy, "I ascribe much of the imperfect vision to-day to the slovenly posture in which people read and write, especially when they have not done growing. How often do you see passengers in railway trains crouching or curled up over a newspaper in a bad light? Not only are they injuring their vision, but their spines as well. I do not say that newspaper reading in itself is the cause for increasing bad sight. It is due, rather, to the distance the paper is held from the eyes, the poor-ness of the light, and the stuffiness of the atmosphere.

"A paper or book should in ordinary cases be held about 18 inches from the eyes, and if artificial light is employed, that should fall, not on the eyes, but on the paper, and of course over the left shoulder. I myself never read in a train, unless it is for the first few minutes of the journey to prevent the people talking to me; after that I'm generally asleep."

Right of Entry into Day Schools.—In the case of Wimbledon Urban District Council *v.* Hastings (King's Bench Division, 24th June, 1902), a point of the greatest interest to sanitary authorities has been decided. It appears that a complaint was made to the Council that one of the rooms in the school concerned—

a high school for girls—was overcrowded, *i.e.*, that too many scholars were allowed to occupy this room at the same time. The Inspector of Nuisances of the Council visited the school and applied to be admitted in order to make an examination of the premises and to ascertain whether the nuisance complained of really did exist. Admission was refused, and this refusal was adhered to, notwithstanding a letter from the Clerk to the Council. Application was thereupon made to a Justice of the Peace for an order to admit, and the application was granted. The headmistress of the school then appealed to Quarter Sessions, contending that the order was bad on several grounds, chiefly so because section 91 (5) of the Public Health Act, 1875, did not apply to day schools but only to dwelling-houses. At this hearing the Court of Quarter Sessions refused to accept certain evidence which was tendered, and which was to prove that the nuisance did not exist. The appeal was, however, allowed by Quarter Sessions and the order of the Justices quashed, on the ground that scholars were not "inmates" within the meaning of the above-named section of the Act. At the present hearing the Wimbledon Council who were the appellants gained the case. In giving judgment, the Lord Chief Justice stated that neither the Justices nor Quarter Sessions had to decide whether a nuisance existed or not, but they might have to consider whether there were reasonable grounds for suspecting the existence of a nuisance.—*The Practitioner*.

H. MACM.

Stuffing Children's Minds with Undigested Knowledge.—Mark Twain has issued a pamphlet, entitled "English as She is Taught," which makes a needed protest against the attempt to cram the memories of school children with information far beyond their power of assimilation. The result often is that the poor little minds have a sort of indigestion which is to the true pedagog more pathetic than it is amusing. Twain gives some of the answers in *physiology* by pupils in the public schools:

Physillogiy is to study about your bones stummick and vertebry.

Occupations which are injurious to health are carbofic acid gas which is impure blood.

The stomach is a small pear-shaped bone situated in the body.

The gastric juice keeps the bones from creaking.

The chyle flows up the middle of the backbone and reaches the heart where it meets the oxygen and is purified.

In the stomach starch is changed to cane sugar, and cane sugar to sugar cane.

The olfactory nerve enters the cavity of the orbit and is developed into the special sense of hearing.

The growth of a tooth begins in the back of the mouth and extends to the stomach.

If we were on a railroad track and a train was coming, the train would deafen our ears so that we couldn't see to get off the track.

John Bright is noted for an incurable disease.—*American Medicine*.

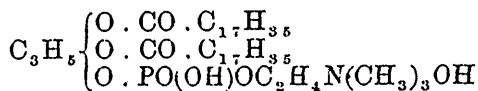
H. MACM.

Selected Articles.

LECITHIN—OVOLECITHIN.

LECITHIN is an important constituent of animal and vegetable tissues occurring more especially in the nerves, the brain, semen, the yolk of eggs, also in blood and in the chlorophyl of plants. Generally it is associated with the cell nucleus, and especially in young cells lecithin exists in the form of an albuminoid compound.

Lecithin can be prepared from the germs of the oat or from yolk of egg, but at present is prepared for medicinal purposes exclusively from the latter material, under the name of Ovolecithin. Chemically lecithin is to be regarded as a diacetic-glycerophosphoric cholin ether, its composition being represented by the formula:



Ovolecithin is a yellowish waxy mass soluble in hot alcohol, also in chloroform, benzene or fat oils. In water or physiological salt solution it swells up forming a jelly.

More than seven years ago J. Stocklasa pointed out that lecithin plays an important part in the vital processes of the plant organism. Subsequently B. Danilewsky, to whom we are indebted for the medicinal application of lecithin, observed that the administration of lecithin was attended with an extraordinarily rapid growth of tadpoles.

The same observer also showed that administration of lecithin internally and subcutaneously to young warm-blooded animals (dog) considerably promoted growth of the body, improvement of the blood and increase of the brain mass so that the animals fed with lecithin excelled the control animals both physically and in psychic relations. Charrin, Serono as well as Desgrez and Aly Zaky fully confirmed the observations of Danilewsky. The digestive apparatus appears to be stimulated in activity by the administration of lecithin; the appetite was sometimes rendered ravenous, there was also a large numerical increase of red blood corpuscles (Danilewsky and Selenski). Stassano and Billon

adopting that result also showed that the resistance capacity of hematin is considerably increased by lecithin. In a similar manner the number of leucocytes undergoes a sensible increase. According to Desgrez and Aly Zaky the excretion of phosphorus from the organism is retarded by the choline contained in lecithin; that circumstance exercises a distinctly favorable influence upon the assimilation of nitrogen, that finds expression in the increase of body weight.

These favorable results of physiological investigation must naturally encourage therapeutical use of lecithin, and, in the case of a series of diseases mostly arising from disturbances of nutrition, it has led to brilliant results.

A wide field for the use of lecithin is to be found in diseases of the brain and nervous system, since according to Danilewsky the assumption is justified that such diseases are often due to deficiency in the components of new plastic restitution within the substance of the nerves, and that by administration of lecithin the disordered tone of the nerve material can be restored, as lecithin is the chief neurogenic component of brain substance. In accordance with that view are the good results obtained by Gilbert and Fouquier, de Diego, Micheli and Riez in cases of neurasthenia and other nervous complaints, as for instance nervous dyspepsia. Danilewsky tried lecithin on himself and found that he experienced an augmentation of nutritive effect, of individuality with capability of resistance and of mental power. Hartenberg found that by subcutaneous injection of lecithin in cases of tabes, general paralysis, various psychoses, hysteria, etc., there was essential improvement effected. Especially good results appear, according to the observations of Aries, to have been produced by lecithin in the various troubles affecting aged persons, when it hastened reconvalescence from acute disease, ameliorated sundry disturbances of nutrition, and in some degree gave the organism renewed vitality.

G. Carriere treated cases of rachitis with lecithin cod liver oil, and within the course of four to six months the disease was arrested as well as a perfect cure effected. That effect appears to be therapeutically the more valuable, because means are thus provided by which all the advantages of treatment with phosphorus may be secured without risk of the dangers attending the use of that substance as a medicine.

Excellent effects of the use of lecithin were observed by A. Narbet in cases of arthrepsia in children whose condition might have been considered hopeless. The evacuations soon became under that treatment normal, the general condition improved and the appetite increased while there was considerable increase of body weight. In these cases lecithin was administered by intramuscular injection in doses of 1 c.c. every other day.

A very remarkable effect of lecithin is attributed to its use by H. Claude and A. Zaky, Lemaski, Morichau-Beauchant, Samuel Bernheim and O. Tabary in tuberculosis and it appears to be especially effectual in the first and second stages of that disease. By its use rapid and certain increase of body weight is secured (0.4 to 1 kilo weekly), strength is restored, the temperature of the body is reduced, cough and expectoration are relieved, quiet sleep obtained and night sweats cease. In several instances the bacilli disappeared after 24 to 30 intramuscular injections. In all cases the hypoacidity of the urine changed to normal hyperacidity. Claude succeeded in obtaining direct proof of the beneficial effect of lecithin upon tuberculous animals. Those treated with lecithin always survived the control animals, the disease assumed a more benignant form, inasmuch as it remained stationary and took a subacutely running broncho-pneumonic type leading to sclerosis. Bernheim and Rollet employed recently in tuberculosis injections in which lecithin is combined with guaiacol, and they consider that in that way better results have been obtained than by using either lecithin or guaiacol separately.

Lancereaux and Paulesco administered lecithin in diabetes connected with affection of the pancreas, as well as in other forms of disturbances of the digestive processes; its use, both internally and subcutaneously, was attended with the best effects recognizable in rapid increase of body weight, amelioration of specific symptoms and of the general condition.

The remarkable rapid increase of red blood corpuscles that is observable according to the previously mentioned studies of Danilewsky-Selenski and Stassano-Billon as a result of the administration of lecithin indicates that it is a valuable means of effecting blood formation, a view that finds support in the clinical observations of Serono in cases of chlorosis and anemia. That authority ascertained that the increase of red corpuscles was as much as from 800,000 to 1,500,000 per c.c.

A further opportunity for the use of lecithin is to be found in convalescence from severe cases of infectious diseases when the powerfully tonic action of that remedy is exercised in the most beneficial manner (de Diego, Riez).

In veterinary practice Fambach has used lecithin in cases of inflammation of the brain and cerebrospinal fever in horses; he speaks of it as the only remedy that has been found efficacious in the treatment of those diseases hitherto considered to be incurable. Fambach recommends the administration of lecithin in doses of 0.5 gramme subcutaneously. An essential condition of success is that the injection of lecithin should be given in the first stage of the disease, in slight cases giving one and in more severe cases two injections of 1.0 gramme of lecithin daily. For that purpose

the lecithin is to be dissolved in the least possible quantity of absolute alcohol (8 or 10 drops). To the alcoholic liquid—which is generally insufficient to dissolve the whole of the lecithin—is to be added, just before the injection, 15 to 20 c.c. of physiological salt solution. The lecithin is then precipitated in the form of flocks which remain suspended in the injection when it is applied. Simple suspension of lecithin in physiological salt solution may also be adopted. If edema should supervene after injection it is not dangerous, but care must be taken to avoid pressure.

Lecithin acts equally well when administered internally or subcutaneously. The average daily dose is from 0.25 to 0.5 gramme given internally; in psychosis it may be increased to 1 gramme daily; when injected, as is specially to be recommended in diseases of the stomach or intestines and in tuberculosis, when a rapid action is desirable, the dose should be from 0.1 to 0.25 gramme every other day. For children those doses are to be reduced to half. Since lecithin is a perfectly innocuous substance the doses above mentioned may in some instances be exceeded.

THE FORBES WATER STERILIZER.

PHYSICIANS are well aware of the fact that, though water is clear and attractive to the eye, it cannot be taken for granted that that water is not poisonous and most unhealthy. Heat is universally acknowledged by the scientific world to be the only sure agent for destroying disease germs in drinking water. Water which has been boiled is free from disease germs and is wholesome to drink, but water as ordinarily boiled is flat, insipid and unpalatable to the taste by reason of having much of its oxygen and other gases driven off by long-continued boiling. Moreover, it is more trouble to go through the performance of boiling, cooling and preparing the water to drink than most people are willing to undertake. Especially is this true where much water is required. Distillation, as accomplished by the many small water stills upon the market, even though rendering pure, wholesome water, is very slow and tedious, for the water leaves the still quite hot, and before fit for drinking it must be cooled, either by standing for a long time or by means of ice, which is liable to recontaminate it, for cold does not destroy disease germs.

The Forbes Water Sterilizer thoroughly sterilizes water, as based on many bacteriological and other tests, such as heavily impregnating water with the germs of typhoid, diphtheria, etc., then passing the impregnated water through the Forbes Sterilizer and then examining the water for disease germs. It is claimed that

in no case, as yet, has a single disease germ been discovered after the water has been put through Forbes' process of sterilizing.

Principle of Operation.—Figure 1 is a purely diagrammatic view of No. 1 or aerostatic feed apparatus, and serves to explain the method of operation.

The raw or unsterilized water is supplied from the inverted bottle 1. The water runs from the bottle 1 into the cup 2, then

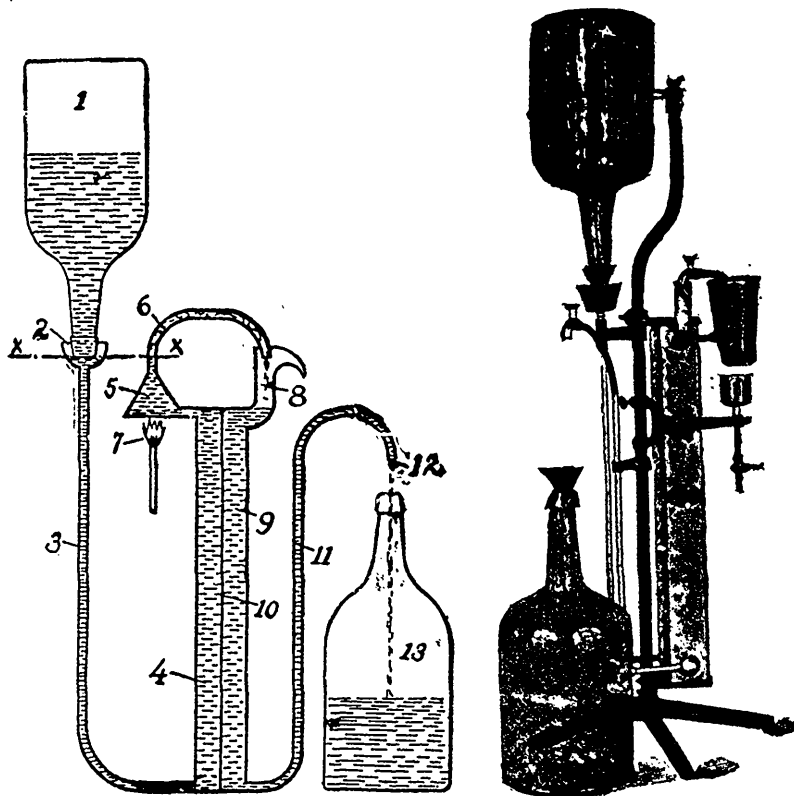


FIGURE 1.—Portable. For use with bottles where water supply is not at hand in pipes.

down through the pipe 3 into the compartment 4 of the heat exchange, which it fills. When compartment 4 is filled the water runs into the heater 5 and rises in the pipe 6 to the level X, where it stops. No more water will now run out of the bottle 1, because its mouth is sealed by the water in cup 2 at the level X. The burner 7 is now lighted and heat is applied under the heater 5, which causes the water in the heater to boil, and in boiling it rises in the pipe 6 and flows over into cup 8, just as a pot on a cooking

range will boil over. It is, therefore, impossible for any water to pass through the apparatus until it has boiled, for it is only by boiling that it can rise sufficiently in the pipe 6 to flow over into the cup 8. This boiling lasts for but the fraction of a second, and once the water has passed through the pipe 6 it is removed from where heat can again reach it. When some water has boiled over, as above stated, the level of the water in the heater 5 and

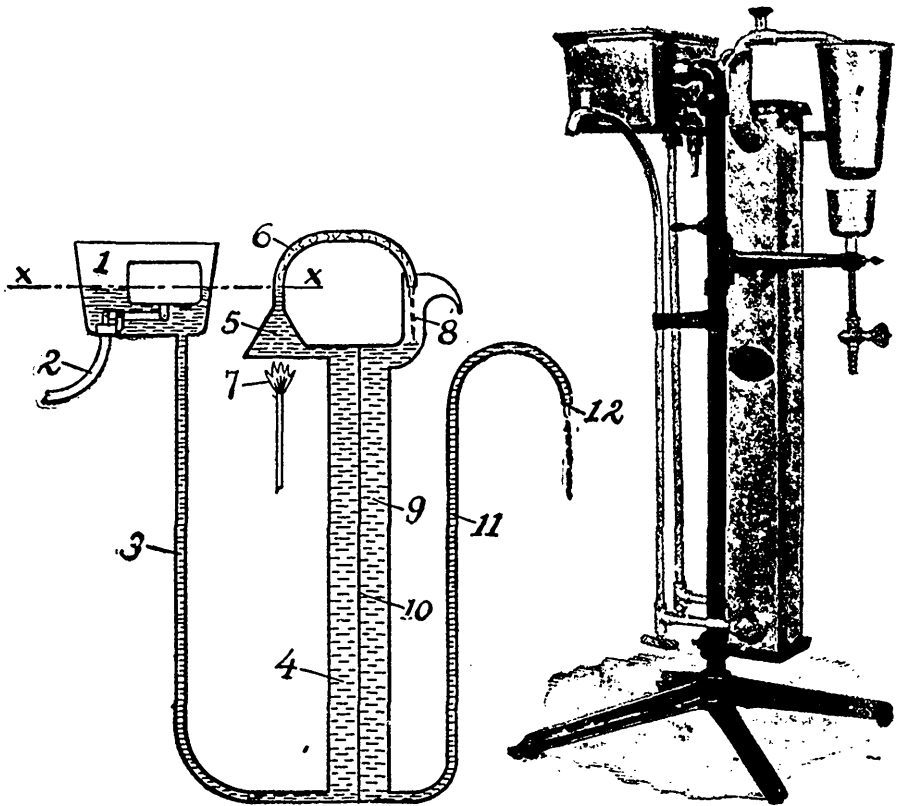


FIGURE 2.—For use on floor, counter or shelf. Can be connected to water supply pipe by iron pipe or rubber tubing.

likewise the level of that in cup 2 is lowered. This exposes the mouth of the bottle 1, so that a small quantity of air enters the bottle and allows a corresponding quantity of water to run out of the bottle and refill the cup 2 and heater 5 up to the level ∇ again, when the mouth of the bottle is again sealed by the water, and no more water can run out of it until the level is again lowered by reason of more water boiling over through the pipe 6.

This action becomes continuous, for the flame 7 is constantly boiling the water in the heater 5 and causing it to flow over through the pipe 6. The water continues to boil over into the cup 8 and quickly fills compartment 9 of the heat exchange. When compartment 9 is filled the water runs out of the pipe 11 at the opening 12 into the receiving bottle 13. While passing down through the compartment 9 the heat of the water, which is boiling hot, is transferred, by conduction, through the thin metal partition or diaphragm 10 to the cold water passing up through compartment 4, so that the water which is boiled in the heater 5 passes out of the apparatus nearly as cold as that entering, while the cold water entering the apparatus becomes heated as it passes up through compartment 4, and reaches the heater 5 in a very hot condition and nearly at the boiling point.

Therefore, the only heat which has to be supplied to keep the apparatus running continuously, is that necessary to bring the already highly heated water entering the heater 5 to the boiling point, and cause it to rise above the normal water level X and boil over through the pipe 6, and so pass on through the remainder of the apparatus to the discharge outlet 12.

Fig. 2 is a diagrammatic view of the No. 2 apparatus. The principle of operation of this apparatus is identical with that of the No. 1 apparatus, but the construction is slightly different. In the No. 2 apparatus 1 shows a water tank with a pipe 2, through which water enters and is allowed to fill the tank up to the water level X, but no higher, as it is restrained by the float-actuated valve shown in the tank.

The small tank with the float and valve merely takes the place of the inverted bottle and aerostatic feed used in the No. 1 apparatus. Both the aerostatic device and the float and valve have the same functions, viz.: maintaining the water level at the line X. In the No. 2 apparatus the pipe 2 is connected with a constant water supply, such as a faucet or the water supply pipe of the house.

After the water leaves the float box it runs down through the pipe 3, and the action of the apparatus from this point on is exactly like that of the No. 1 apparatus before described.

The Forbes Sterilizer is used by almost every company in the United States Army, and the annual reports of the United States Surgeon-General to the Secretary of War for the past two years have been very flattering as to the efficiency of this apparatus.

The British Army made a test of the Forbes Sterilizer in the recent South African campaign, and the reports could not have been better. The manufacturers made a sterilizer for households and physicians' offices, and larger ones for hospitals, hotels and other institutions. The sterilizers can be operated by either gas, Bunsen burners, or by kerosene, and the cost of operation is a mere trifle.

MUSICAL THERAPEUTICS.

GLAD news comes from New York. Henceforth nobody, so long as there is a piano-organ in sight, need be ill. The members of the Society for the Culture of Musical Therapeutics have fixed all that. They have evolved a plan by means of which diseases of various sorts, or perhaps, of all sorts, are going to surrender to the divine harmonies administered by catgut or reed. The enchantment of this method of cure is well known to everybody in the society. The members are now engaged in apprising the public that in music they have a force which may, under adverse circumstances, be as dangerous as dynamite. The lady who is the high priestess of the cult, Miss Eva Augusta Vescelius, is responsible for the warning, and it is about time to everybody that Eva Augusta be attended to when she talks.

Think of the awful consequences if a sudden shower of Wagner should descend upon the helpless inmates of our city hospitals, if some wild craze, some tidal wave of musical therapeutics should strike the administrators thereof! The theory is that music is a cure-all, and that the more of a good thing the better. And so, the massed bands of the city might storm the General Hospital, for instance, in the expectation of a miracle. Medical and surgical wards would be expected to give back their human contents to the city healed and made sound, the armless and legless would come forth whole. Everybody would be cured quickly and inexpensively, and all would be lovely. But Miss Vescelius will not allow all to be lovely. She informs the members of the society that all music is not good for all cases, any more than the practitioner would give one specific for all diseases. "Rocked in the Cradle of the Deep" may be all right for insomnia, but utterly unsuitable for cholera infantum, for instance. Miss Vescelius has found that "All Coons Look Alike to Me" is a tune excellently well adapted for hospital use, while "Comrades" has been known to cure hopeless cases of locomotor ataxia. It is not, however, a specific for distemper. There is a new song called "She Touched Her Father for a Dollar," that ought to commend itself to Miss Vescelius. Attempted in the alcoholic ward, it should result in a rapid cleaning out of this section of the institution. The wards would be reminiscent of so much that the inmates would remember. Rhythm, harmony, cheerfulness are characteristics which should be sought in musical therapeutics. Above all, there must not be too much of a good thing. The German band, for instance, must be kept far from the sensitive ears of those who suffer, and are helpless to retaliate. The healing properties of music are all right in their way, but they are not necessarily on tap, so to speak, at all hours of the day and night. People want some rest, even from the business of getting cured.—*Exchange.*

The Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., must be in our hands by the fifteenth of the month previous to publication.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the tenth of the preceding month. Agents for Germany, Starbuck's News Exchange, Mainz, Germany.

VOL. XIV.

TORONTO, OCTOBER, 1903.

NO. 4.

Editorials.

PYORRHŒA ALVEGLARIS.

Pyorrhœa alveolaris, called also Rigg's disease, expulsive odontitis, is a purulent inflammation of the dental periosteum, with progressive necrosis of the alveoli and looseness of the teeth. Among its most noted concomitants are: rheumatism, trophoneurosis, and excess of the lime salts, all of which fit in with the idea, commonly entertained, that this disease is found almost exclusively in patients of the arthritic diathesis. It has also been observed in diabetic patients.

The excess of lime is revealed by two circumstances: the resistance offered to caries by the teeth, and the excessive amount of tartar deposited about them. The disease generally appears in one or two teeth. Afterwards other teeth are progressively invaded, so that the patient may present different degrees of the same disorder—from a tooth which is almost sound to another tooth for which no treatment will avail. The first part of the treatment consists in the complete, minute, careful removal of tartar, as any particles which remain will prevent repair and become centres for future deposits. Younger says that an operator should devote an hour or more to each tooth. Although this statement may appear exaggerated, it shows the precision required in order to secure the removal of tartar in an effective manner.

When the tartar is scraped off, there remains between the tooth and the loosened gum a space formerly occupied by tartar, but which is empty—a purulent burrow—for suppuration is an almost constant phenomenon and appears early in this disorder.

A good review of the subsequent treatment is given by Dr. Mahe, in an article which appeared in *La Presse Medicale*, August 12th, 1903. Ablation of the purulent burrow by bistoury or scissors is recommended as the simplest and most efficacious procedure. Ablation by the thermo-cautery or the galvano-cautery has been used; but neither method is so radical as the cutting operation, and besides every practitioner is not provided with these cauteries. Caustics have been tried—the whole series of acids from chromic acid recommended by Magitot, to lactic acid, extolled by Younger, not forgetting sulphuric acid of different strengths.

Dr. Robin uses concentrated sulphuric acid, concurrently with the acid nitrate of mercury, but the results of his treatment are less perfect than, and not so rapid as, those obtained by ablation with the bistoury. Dr. Mahe, when patients refuse ablation with the bistoury, tries the following method: One, two, or three teeth are treated at the same time. The teeth are isolated from the mucous membrane by plugs of wadding. The neck of the tooth having been carefully wiped, a drop of strong sulphuric acid is introduced into the burrow by means of a small platinum spatula. The acid is allowed to act for some moments, after which the

mouth is freely irrigated. A drop of the acid nitrate of mercury is then introduced into the burrow. This operation causes, for several hours, a sensation of burning. Three or four days after the operation, a greyish purfling appears around the necks of the teeth which have been operated on, and a small slough which is easily detached. The treatment is renewed as often as may be necessary, in order to obtain the destruction of the pus cavity. The patient is advised to brush his teeth with white soap dissolved in water every night, and every second or third night to apply to the affected gums a portion of the following preparation:

R	Tinct. Krameria	}	.....ãã	5 grams
	“ Thrya Occidentalis			
	“ Spts. Cochlearea	}	.....ãã	1 “
	“ Iodine			

A lotion of chloride of zinc (0.5 per cent.) is also used with advantage, although quite insufficient as the sole remedy. It should be used in the morning, lukewarm. The pus cavities having been cleaned out by pressure of the fingers, this lotion should be applied for five minutes at least, after which the teeth should be brushed with the following astringent powder:

R	Carbonate of Strontium (pure)	.....	30 grams	
	Powdered Catechu	}	.....ãã	5 “
	“ Rhatany			
	“ Cloves	}	.....ãã	1 “
	“ Ginger			
	Eugenol	.....	6 gtt.	

This treatment will be effective the sooner it is put into operation, and the more it is applied to teeth which are not much affected.

When the diseased condition is well marked, one can only expect the immobilization of the disease, or at least a slowing of the movement in the diseased process. When the teeth are quite loose, the case is different. If the treatment indicated above does not produce a notable improvement of the affected teeth in a week, they should be extracted.

Extraction suppresses a focus of infection from which sound teeth may be affected, and it deprives the patient of a pretext, too often taken advantage of, for throwing doubt on the efficaciousness of the treatment employed, and abandoning it prematurely.

J. J. C.

SUICIDE EXPERIENCE IN A FRATERNAL INSURANCE ASSOCIATION.

SPECULATION as to the reasons which impel ordinary men to kill themselves, being of unflinching interest to physicians, as well as the general public, we have thought it profitable to throw a sidelight on this obscure subject, by considering the motives for the act, alleged by the friends of the suicides of a special class, viz., the insured.

For our facts and figures we are indebted to the report for 1902 of the Medical Examiner in Chief of the Royal Arcanum, a fraternal insurance association of Boston, Mass. (*vide Royal Arcanum Bulletin*, August, 1903).

It appears that in 1898 the Royal Arcanum adopted a suicide law, which voided a policy of life insurance granted by the Association in case a brother suicided during the first five years of his membership. The Medical Examiner compares the number of suicides in the Association since 1898, with the number of deaths from the same cause and during the same period prior to the enactment of this law, in order to note its influence on the deaths within five years of admission, which it was expected to diminish. As the law was operative only during the last five months of 1898, the experience obtained during that year is not included in the table. The deaths, both before and after the law came in force, can also be more clearly seen by omitting the year 1898:

	Year.	Number of Suicides, Duration of Membership not more than Five Years.	Number of Suicides, Duration of Membership more than Five Years.	Total.
Experience under Suicide Law	1902	16	68	84
	1901	10	71	81
	1900	13	63	76
	1899	10	57	67
Experience prior to Suicide Law	1897	23	59	82
	1896	25	53	78
	1895	33	36	69
	1894	25	37	62
	1893	25	35	60

It will be noted that the number of five-year deaths for the first three years following 1898, was only about one-third as numerous as prior to that date. The number (16) in 1902 is

larger than during the three years immediately preceding, but only two-thirds as large as in the years prior to 1898.

Another table shows the ratio of deaths within five years per one thousand members of the order, and a similar ratio of deaths among members of more than five years' membership. A comparison of these ratios since 1898 with those prior to 1898 is interesting.

	Year.	Average Membership.	Number of Suicides of not more than Five Years' Standing.	Ratio per 1000 Members.	Number of Suicides of more than Five Years' Standing.	Ratio per 1000 Members.
Experience under Suicide Law	1902	242,867	16	.06	68	.28
	1901	220,603	10	.04	71	.32
	1900	201,622	13	.06	63	.31
	1899	190,057	10	.05	57	.29
Experience prior to Suicide Law	1897	192,078	23	.11	59	.30
	1896	183,160	25	.13	53	.28
	1895	166,134	33	.19	36	.21
	1894	153,750	25	.16	37	.24
	1893	143,192	25	.17	35	.24

The report shows, on the above table, that since the enactment of the law, the ratio of deaths per one thousand members has been smaller among five-year members and larger among those of a longer period of membership. While the number of five-year deaths in 1902 is larger than during the three years preceding, the ratio per one thousand is practically the same. It seems, therefore, to be a reasonable conclusion that, according to the experience of the Royal Arcanum, the suicide law has had a restraining influence on the tendency to suicide among the members whose period of membership brings them within its provisions.

Of the eighty-four members of the order who suicided in 1902, the average duration of membership was eight years and eight months. In this matter of age it is noted that the highest ratio is found, and continues to be found, between the ages of fifty-one and sixty (5.88 per one thousand), when the heyday of life is spent, and the inducement is strong to make some provision for the dependent. An examination of the family history in each of the eighty-four cases of suicide in 1902 does not reveal that there was evidence, at the time of admission, of material degeneration of the family stock, or tendency to suicide in the family of the insured. In one case, the applicant stated that the cause of his

mother's death was "nervous prostration from shock," probably the result of apoplexy. In another case it appears that the member's father was temporarily insane twenty years before the son was admitted, but that he had recovered and was then living at the age of seventy. The grandfather of one suicide was insane at the age of sixty-three, and still another had an epileptic brother. No member of either family had suicided. After one had been admitted his brother became insane. Of the eighty-four suicides in 1902, the supposed cause in thirty was "financial trouble." This cause has been assigned, not only when large losses have been experienced, but also when the brother's business, although always small, has gradually grown smaller, until a complete collapse has been feared. Twenty-three suicides had been in previous ill-health. The ill-health noted in many cases was due to insomnia, despondency, etc., conditions a man would be expected to suffer from if he were resisting a temptation to suicide, although he might be perfectly rational and comfortably situated in life. A few of them were suffering from incurable diseases. Six were classed as temporarily insane, "though it is probable that none of them were really insane at any time."

In the case of a suicide, who has been in the order less than five years, it is to be expected that his beneficiary will use every argument to obtain the insurance. He may claim that the suicide was suffering under the "delirium of other illness." In such cases the Medical Examiner in Chief contends that a physician is willing to stultify himself professionally, and council officers will exhibit more zeal and loyalty on behalf of the individual than the order.

Six cases of suicide were marked "Intemperate and out of employment," and seven, "Temperate and out of employment." Intemperance was given as the principal cause in five cases. "Domestic trouble" is the supposed cause in nine cases. Sixty-six suicides were married, eleven unmarried, and seven were widowers. A great majority of the suicides recorded during 1900-01-02 were men of moderate means, carrying from three to five thousand dollars of insurance. A few, however, carried much more; two carried forty-four thousand dollars each, and one was insured for nine thousand dollars. The bulk of these large sums was in each case in old line companies. In looking up

the supposed cause of the suicidal act in these five cases, the important fact developed, that no reasonably adequate cause could be assigned in four cases, hence the brothers were thought to have been "temporarily insane." The fifth suicide was thought to have become tired of life because he had lost some money. The Examiner thinks that unless there were motives for the crime which the investigating committee failed to discover, the "suicidal impulse" was chiefly responsible, except in the fifth case. Any man struggling against such a temptation would naturally see that his family was well protected financially, and the performance of this supposed duty to his family would unfortunately remove from him the influence which in the past had probably been to him the most powerful restraining force.

The conclusions of the Examiner in Chief of the Royal Arcanum are uncomplimentary to some of his brethren, and reflect severely on some medical officers of councils, but his facts are incontrovertible. We must believe, then, that there are men who look at life insurance much as a gambler looks at a valuable stake. The insured man must lose his life in order that his heirs may win the stake, and, so anxious were many members of the Royal Arcanum to help their heirs to win, that a five-year membership clause had to be introduced to save the Association from financial loss through suicide mortality.

J. J. C.

CHRISTIAN SCIENCE AND OTHER FLIGHTS OF IMAGINATION.

A CITIZEN of Toronto, a Christian Scientist, was recently found guilty of manslaughter in permitting his boy of sixteen to die of diphtheria without medical attention. The case was appealed, and the Court of Appeal holds that the judge at the first trial delivered a proper charge to the jury; that the term "necessaries of life" as used in the criminal code includes medicines and medical treatment.

A coroner's jury, in another recent case in this city, added a rider to its verdict urging that legislation be sought to make it a criminal offence for a Christian Scientist to treat any person under age. It seems almost unaccountable how Christian Science and other new cults spread and gain followers, even among seem-

ingly well-balanced persons of liberal education. Perhaps the love of promiscuous reading, and the craving of ladies of leisure for some "green pastures" (other than Piccadilly) to browse in, leads them on and on into the maze of Christian Science and other brain cake-walks, and ever and anon the fashion changes, and a new "rag-time" by a new freak is jangling in our ears, till even we physicians, the prosiest of men (who are, with con-



CHRISTIAN SCIENCE MOTHER — Eleanor, what is the matter?
CHRISTIAN SCIENCE CHILD — Oh, mamma, I got a terrible error of the mind in my stomach.—*New York Life*.

summate assurance, told by adherents of these various and sundry beliefs that we cannot understand, we are of the earth, earthy, and our treatment is nothing less than "madness and murder"), are led to exclaim that we are glad that there is (such) "method in our madness."

Another spasm of soulfulness, a variegated-scented-geranium sort of publication, came under our notice last month. It is

widely offered for sale, and we met it already in the hands of our most hysterical patient. Fortunately, the able editor of *American Medicine* comments fittingly and tersely upon the magazine to which we refer, and we take pleasure in quoting his words, and our readers will profit by perusing them.

“ ‘THE NEW THOUGHT.’—When one makes a study of the weeds of morbid psychologic literature and sects so luxuriously springing up in our country, and after he has grown tired enough of Mother Mary Baker Glover Patterson Eddy and her children, he will next come upon the ‘New Thought,’ edited by Ella Wheeler Wilcox and William Walker Atkinson. (In proportion to the fame of great ones the entire set of names must be spelled in full.) The perusal of a half dozen numbers of this periodical will only take an hour or two, and although so far of much interest and instructive, one will then begin to tire of the emptiness of the new thought, and of its oldness, and especially of its puerile and repetitive lessons. One will get a wearying conviction that if, as the publisher avers, there are 100,000 subscribers who find this childish stuff adapted to their needs, then surely the schoolmaster is not abroad in the land, or he is not doing his duty very thoroughly. Had we space we would like to reproduce a few of the hundreds of excerpts we had marked, to give an idea of this, the silly season of American growth. There is nothing directly vicious or nauseating about it, as is so common in other forms, but it is of course indirectly morbid. The people who are ministered to and treated are surely sick, very much so, mentally and socially, but the teachers, the high priestesses, and their little amen-sayers, the priests, are surely much ‘sicker.’ The mark of morbid self-consciousness is in every article and sentence of most of the crazy or crank literature so rampant among us. It is indeed not only marked by it, but is rather drenched in it, so that teachers, priestesses, and humble pupils seem to delight in standing and paddling in their own slush. It is an old and well-recognized law of disease and insanity that one is unconscious of the healthy organ. Most people, for instance, go through life without a moment’s attention to their knees, their ears, or their ‘desires.’ But let them get synovitis middle-ear inflammation, or the New-Thought disease, and at once all their attention is absorbed by their knee, ear, or ‘mind.’ In all of this literature, fortune-telling, ‘character readings,’ ‘somniaopathy,’ phrenology, mediumship, ‘graphology,’ ‘astrology,’ ‘self-healing,’ hypnotism, occultism, and a hundred forms of morbid ‘ministering to the mind-diseased’ form the staple of ‘instruction,’ the substance of page after page of magniloquent nonsense, and more

important still, fill all the advertising pages to repletion. The personal answers to correspondents illustrate it to satiety. 'How shall I get rid of fear?' 'How prevent mean thoughts?' 'Is love between the sexes incompatible with the highest mental states?' The jealous wife, 'misunderstood woman,' misunderstandings with husbands, How to get well, 'Soul-mates,' 'the wearing of glasses and the magnetic gaze,' bashfulness, the second divorce—these are some of the things the editor takes upon himself to write about to the victims who appeal to him for advice. 'Thought-Force' is a book by one of the omniscient teachers, and its purpose is thus stated by him to be:

"A wonderfully vivid book answering the questions: Can I make my life more happy and successful through mental control? How can I affect my circumstances by my mental effort? Just how shall I go about it to free myself from my depression, failure, timidity, weakness, and care? How can I influence those more powerful ones from whom I desire favor? How am I to recognize the causes of my failure and thus avoid them?"

"Can I make my disposition into one which is active, positive, high-strung, and masterful? How can I draw vitality of mind and body from an invisible source? How can I directly attract friends and friendship? How can I influence other people by mental suggestion? How can I influence people at a distance by my mind alone? How can I retard old age, preserve health and good looks? How can I cure myself of illness, bad habits, nervousness, etc.?"

"'Thought-Force' gives an answer to questions like these.

"It is evident that here is a new disease in the world, genuinely epidemic, too. The diagnosis is easily made, but is there any therapist would dare suggest a treatment?" W. A. V

ANNUAL MEETING OF THE ASSOCIATION OF MEDICAL HEALTH OFFICERS OF ONTARIO.

THE annual meeting of the Association of Medical Health Officers of Ontario was held at Peterborough, September 9th and 10th, 1903. The sessions of the Association were held in the Town Council Chamber and a citizens' meeting in the Y.M.C.A. hall. The afternoon of September 10th had been set apart by the local committee for the entertainment of the members of the Association, who were taken in carriages to the various points of interest in the town, after which they visited the remarkable "Lift Lock," on the Trent Valley canal. The Medical Association of Peter-

borough, who took a special interest in the entertainment of the Association, arranged for an excursion leaving Peterborough for Lakefield, September 11th, 8.30 a.m. There the members of the Association and their friends took a steamer for a trip through the beautiful Kawartha Lakes, reaching Burleigh Falls at 12 o'clock. At the Burleigh Falls Hotel, the Hon. J. R. Stratton, Provincial Secretary, treated the party to a superb luncheon. The trip was completed in time for members to leave Peterborough by the evening train. At the meeting of the Association, several good papers were read, some of which will be published in future numbers of this journal. For the ensuing year the officers are: President, Dr. J. W. Lane, Mallorytown; Vice-Pres., Dr. Chas. A. Bowlby, Brantford; Secretary, Dr. Charles Hodgetts, Toronto; Executive Committee: Dr. Bryce, Toronto; Dr. Shaw, Keene; Dr. Boucher, Peterborough; Mr. W. Chipman, C.E. Toronto; Mr. W. S. Richards, Chatham.

The next meeting of this Association will probably be held at Sarnia. J. J. C.

EDITORIAL NOTES.

A Practical and Rapid Method of Making a Suspected Water Drinkable.—A practical method of making a suspected water drinkable is of the greatest importance to soldiers and camping parties. Drs. Vaillard and Georges, Professors at the Val-de-Grace Military School, in France, have devised a portable set of reagents for this purpose, consisting of two tablets and one lozenge. They are:

TABLET 1.

R Iodide of Potassium (dry)	10	grams.
Iodate of Sodium (dry)	1.560	"
Methylene blue	q.s.	

M. Make 100 tablets, each containing 0.1156 gram. of the mass.

TABLET 2.

R Tartaric Acid	10	grams.
Sulpho-Fuchsin	q.s.	

Make 100 tablets, each containing 0.100 gram. tartaric acid.

LOZENGE.

R Hyposulphite of Sodium

	11.60	gram.
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Melt with a gentle heat and make 100 lozenges, each containing 0.116 gram.

When used the reactions are as follows: The simultaneous dissolution of an iodine tablet and a tartaric acid tablet produces exactly gram 0.06 free iodine, a quantity sufficient to purify a litre of water. There remains gram 0.0346 iodide of potassium, which facilitates the solubility of the iodine. The salts formed are: a little neutral tartrate of potassium, a little tartrate of sodium and potassium, and a small quantity of cream of tartar, owing to the presence of an excess of tartaric acid (gram 0.06454). The introduction into the water of a lozenge of hyposulphite of sodium produces the almost instantaneous disappearance of all the iodine, which is changed by the hyposulphite into iodide of sodium, in the proportion of gram 0.112 per litre. The following printed instructions are sent with each package: "The tablets should only be used to purify at one and the same time the contents of a pail or camp-kettle, that is to say, ten litres of water. Place at the same time a blue tablet (iodate-iodide) and a red tablet (tartaric acid) in a cup containing a little water. (If they are dissolved in a larger quantity of water, the carbonates contained in the water neutralize the tartaric acid intended to cause the reaction by which the iodine is liberated, and the intended reaction would not take place.) Dissolve the tablets by stirring them with anything handy. The liquid turns a deep yellowish-brown color. When the tablets are dissolved, pour the brown liquid into the water which is to be purified. The latter then turns to a yellowish color. Dissolve a white lozenge (hyposulphite) in a cup containing some water, and pour the latter into the pail or camp kettle. Shake. The water immediately becomes clear, and may be drank right away. When the water is muddy a preliminary filtration, even of the simplest kind, should precede the use of the chemicals. This precaution is all the more necessary to take, because organic matter held in solution in the water, and earthy and vegetable matters which may be in suspension in it, diminish very considerably the efficaciousness of chemical purification of water by iodine.

Canadian Canned Meats.—In Bulletin 85, Laboratory of the Inland Revenue Department, Ottawa, Canada, A. McGill submits, June 9th, 1903, a report on ninety-nine samples of canned meats furnished by American and Canadian manufacturers. In two of these samples the meat was quite spoiled; in three others it was

slightly spoiled. The remaining ninety-four samples were in good condition. It is worthy of note that one of the slightly spoiled samples contained boric acid. The fact may imply that the meat was not in good condition when put up, but it would be going too far to hold this as proved. With this exception, all samples containing preservatives, were found to be in good condition. All samples have been examined for preservatives. The only preservative found is boric acid, probably added in part as borax. This has been found in twenty-one samples, as follows:

	Samples.
Chicken	4
Turkey	1
Wild Duck	1
Paté de foie gras	1
Tongue	3
Ham	3
Chicken, Ham and Tongue	1
Canned Beef	3
Smoked "	2
Pigs' Feet	1
Brawn	1
	21

Mr. McGill adds: "In no case has the quantity of boric acid found exceeded the limit fixed by the British Parliamentary Commission, viz., 0.5 per cent., and in most cases it has fallen markedly below this amount."

Canadian Canned Vegetables.—In Bulletin 87, Laboratory of the Inland Revenue Department, Ottawa, Canada, A. McGill submits, July 14th, 1903, a detailed statement of the analysis of 100 samples of canned vegetables sold in Canada, and almost all of which were also prepared in this country. These may be classified as follows:

	Samples.
Canned Peas	27
" Corn	28
" Tomatoes	14
" Beans	20
" Carrots	1
" Beets	3
" Cabbage	1
" Asparagus	1
" Mushrooms	1
" Pumpkin	2
" Squash	2
	100

All these samples were examined for chemical preservatives, but no substances of this nature were detected. With two exceptions,

all the samples were found to be in good condition. In addition to the examination just indicated, the samples of peas were submitted to a test for copper. Traces of copper were found in two of the samples. Mr. McGill further says: "I have no evidence to show that these traces mean any intentional addition of copper for the purpose of intensifying color. A sample of French peas gave sixty parts of copper per million. I may add that the question of the wholesomeness of peas greened with copper is yet unsettled, but the general weight of opinion in English-speaking countries is adverse to the practice.

Butter-Milk as a Food for Young Children Affected with Gastro-Enteritis.—Dr. Arraga, of the Buenos Ayres hospital, Argentina, has experimented with butter-milk as a food for children affected with gastro-enteritis. The following instructions were given for the preparation of the butter-milk used in his experiments: "The butter-milk is taken from a cream which has not been exposed for more than twenty-four hours to the lactic acid formation. When obtained in this condition, it is treated in the following manner: to one litre of butter-milk add twenty-five grams of wheat flour and thirty-five grams of cane sugar. This mixture is then heated for two minutes at least, stirring it continually, and letting it boil three or four times. It is then put into sterilized bottles, which are kept on ice. Before serving it, the butter-milk is placed on a water bath at the temperature of the body." This product has given Dr. Arraga the very best results in serious cases of gastro-enteritis.

The Use of Salicylic Acid as a Food Preservative.—In the *Lancet*, March 14th, 1903, Drs. Macalister and Bradshaw report on the employment of salicylic acid as an agent for preserving foods. They think that the objections made to the use of moderate quantities of salicylic acid for this purpose are not defensible, and they challenge those who maintain the contrary opinion to publish a single case in which an accident has arisen from such use. They declare that the employment of this substance—harmless in their opinion, when mixed with food in quantities, such as are used in industrial purposes—enables manufacturers to put on the market foods which are healthful, agreeable, and inexpensive, and of such a nature as to render the greatest services in the alimentation of people in moderate circumstances. The authors

declare that their conclusions have been reached "after mature consideration, and with an adequate sense of responsibility."

Action of Bitter Substances on the Small Intestines.—Dr. A. Jodlbauer, in *Arch. de Pharmacodynamie*, t. x., p. 201 1902, gives the results of his studies on the absorption of a solution of sugar from an isolated coil of intestine, under the influence of different bitter substances: hop, quassine, absinthine, and sulphate of quinine. He shows that these bitter substances did not exercise a constant action on the absorptive power of the intestine. They have a weak secretory action. In general, however, secretion and absorption are increased when the bitter substance remains in the intestine for an hour. This increase may be observed even after the lapse of four days. The action of bitter substances in the alimentary canal is local, and appears to be specific.

Does the Farmer Skim the Milk?—Out of 760 samples of milk and cream analyzed in the Laboratory of the Chicago Health Department, for the week ended August 15th, 1903, sixty were found below grade. Among these 760 samples from all sources, 112 were taken at the trains before the milk had come into the possession of the city dealer. Out of these 112 samples, four were found below the standard of butter fat, and forty below the standard of total solids. Thus, while the percentage of samples below grade from all sources was only 7.9, the proportion of samples below grade in the milk and cream direct from the farmer, and before the wicked city dealer had an opportunity to tamper with it, was nearly 40 (39.2) per cent. Dr. Reynolds very properly remarks that: "If the State Pure Food Commission will take care of the farmers, the Bureau of Milk Inspection of Chicago will continue its care of the city dealers." J. J. C.

PERSONALS.

DR. J. E. ELLIOTT is moving this month from Church Street to 69 Bloor Street East.

CONGRATULATIONS are in order to Dr. J. M. MacCallum, of 13 Bloor Street West, on his marriage to Miss McMaster, of Toronto.

DR. and MRS. J. H. COTTON, of Spadina Ave., returned from the Old Country two weeks ago.

DR. J. T. CLARK, of this city, was married last month to Miss Jessie Malcolm, of Kincardine, Ont.

DR. W. H. PEPLER removed last week to his new, brown stone residence recently purchased, 600 Spadina Avenue.

DR. J. J. CASSIDY is removing this week from 69 to number 43 East Bloor Street, which he recently purchased.

DR. J. J. CASSIDY's daughter, Miss Dolorosa Cassidy, was married at St. Basil's Church, St. Joseph Street, on September 9th, to Mr. Doherty, of Guelph. The bride and groom left immediately on a six weeks' trip to Winnipeg, and through the West, and will settle down in Guelph the end of this month.

THE LATE DR I. N. LOVE.

THE following tribute was paid to the memory of Dr. Love by the editor of the *Alkaloidal Clinic*, in the August number of that publication:

"I. N. Love is dead. Stricken down while making an address at a banquet, he may be said to have fallen in the most congenial of his pursuits, the one for which he was most admirably fitted by nature. He will be sorely missed. There was that about his buoyant, happy, optimistic nature that was irresistible, that made one condone any faults that might be seen. No man in America had more devoted friends; for everyone who knew him, knew that Isaac was ready to share his purse with you, or heave a brick at your enemy at the slightest intimation.

"Some of our readers may remember the brilliant group that collected nightly in the hotel at Newport, when the A. M. A. held its meeting there. Wood is gone, and Davis, and Rohe, and Owen, and now Love has joined the rapidly increasing majority on the other side. Well, it is one of the merciful provisions of Nature, that as we approach the river the ties that bind us to this side weaken, and those that attract us yonder grow stronger. Good-bye, Love. Surely, in the great Beyond that happy spirit is not wasted."

News of the Month.

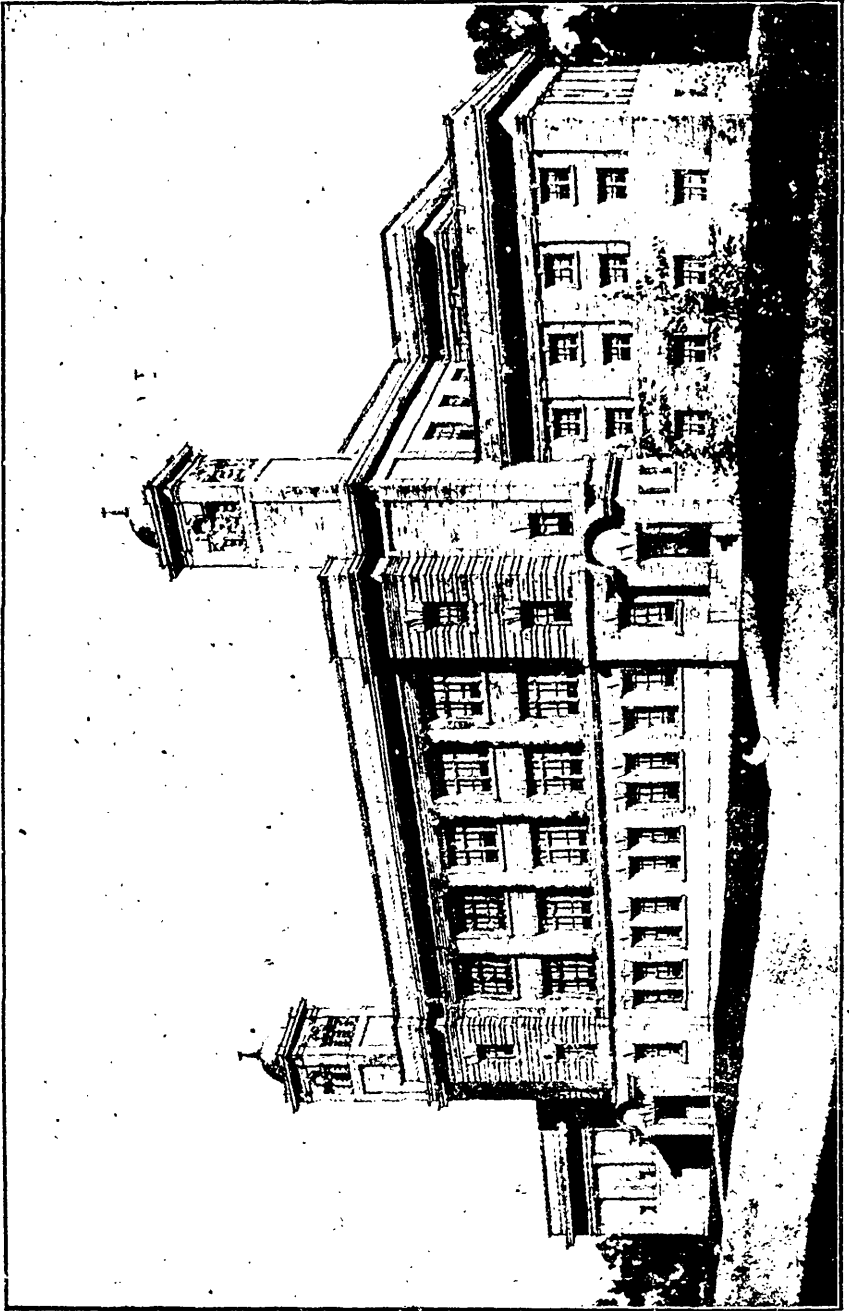
THE OPENING OF TORONTO'S NEW MEDICAL BUILDING.

THE opening of the new building of the Toronto Medical College in Queen's Park, on the first of this month, is a red-letter day in the history of medical education in Canada. The event marks the practical consummation of the federation of the two great medical colleges in the city, Trinity and Toronto. Their united staffs of professors will make one of the largest and strongest medical faculties on the continent, and the registration of students will, it is expected, total over 600—by far the largest attendance at any medical college in Canada, if not in America. The event further marks the gathering of some of the best known medical men in the world to be present at the opening of what is generally regarded as the completest and most up-to-date medical college building on the continent. It is the auspicious inauguration in Toronto of the best and most efficient accommodation for the teaching of scientific medicine that can be provided.

On Friday afternoon, the 2nd inst., at three o'clock, there will be a meeting in the large new lecture theatre, when the new laboratories will be formally declared open, and the inaugural address will be delivered by Professor Sherrington of the University of Liverpool, England. Other distinguished guests will be present and will take part, of whom may be mentioned Professors Welch and Osler, of Johns Hopkins; Professor Keen, of Philadelphia; Professors Minot and Bowditch, of Harvard; Professor Chittenden, of Yale; Professor Roddick, of McGill; Professor Lee, of Columbia; Professor Barker, of Chicago; and Professor McMurrich, of the University of Michigan.

The accommodation of the new lecture theatre will of necessity be limited, and the invitations will therefore be restricted to individuals to whom the Committee think wise to issue such.

The opening lecture of the seventeenth session since the re-establishment of the Faculty of Medicine of the University of Toronto, will be given in the University Gymnasium, on Thursday evening, October 1st, at 8.30 o'clock. This lecture will be mainly a students' function, and whilst a considerable number of guests will be invited, all students will be admitted on presentation of their registration tickets.



NEW MEDICAL BUILDING, TORONTO UNIVERSITY.

On the forenoon of Friday, the 2nd inst., other of the distinguished strangers will address the students in the lecture theatre.

University convocation will take place on Friday afternoon in the University Gymnasium, and certain honorary degrees conferred.

A banquet will take place in the evening, when the invited guests from abroad will be entertained by the Faculty.

The attendance at the Toronto Medical College has been growing at a phenomenal rate during the last few years. In 1897 the total registration was 295; last year it totalled 424, and the year before 474. To properly handle the increasing classes, the new building was an absolute necessity. There is ample accommodation now for over 700 students.

This building is situated between the University Library and the anatomical wing of the Biological building. It has cost something like \$175,000 to complete. It is three storeys in height in front, with an additional storey and sub-basement in the wings, which extend eastward. Two large lecture rooms are provided which will flank the main building; the larger will have accommodation for about 350 students; the smaller for about 200 students.

In the south wing, in what may be called the basement, are situated caretaker's quarters, lavatories, recreation rooms and reading rooms for the students; in the same storey in the north wing is placed a large museum of hygiene.

The three main floors of the building are arranged upon the unit system of laboratory construction proposed by Professor Minot, of Harvard University. The main features of the unit system are all comprehended in the character of the laboratory "unit" room. This must, first of all, be no larger than is required to accommodate readily the maximum number of students whose practical instruction a single demonstrator can efficiently guide and control. It must also be of such dimensions that it can, at need, be made to serve as a museum, a library or reading room, or a small lecture room. The units, further, must be placed with respect to one another, preferably in pairs or series, that, by the removal of the partitions separating them, rooms of larger dimensions may, when desired, be obtained at a minimum cost and in a short time. The dimensions of such a unit, as determined by Professor Minot, are 23 by 30 feet, and this room will accommodate twenty-four working students, which number, experience shows, is the largest that should be under the supervision of a single class demonstrator.

The south wing is occupied by the Arts Department of Physiology, whilst the main portion of the building and the north wing

will accommodate the final departments of medicine. On the ground floor in the main portion are situated in front of the dean's room, a large faculty room, a lavatory and a library, behind which is placed a large pathological museum.

In the north wing in this floor are placed a chart and preparation room back of the lecture theatre, preparation and store rooms for the pathological museums, and laboratories for gross pathology. The second and third floors in the same wing and in front contain the laboratories of pathological histology and bacteriology with rooms for the Professor of Pathology and demonstrators, and unit rooms for small special classes. In the north wing on the third floor three units are occupied by the Provincial Board of Health for its bacteriological and chemical laboratories.

Architecturally, so far as the extension is concerned, the utmost has been done considering the difficulties that the enormous window space interposed. The appearance of the buildings, however, though of course not in the same class as the University building from the architectural point of view, is on the whole, very acceptable.

A feature of special interest is presented by the small research rooms. The half units are intended to be used for various purposes, but chiefly for small groups of students pursuing advanced work or for special lines of research, but each of the fifteen small rooms, shown in the plans as adjacent to the lecture theatres, is reserved for individual workers carrying on selected investigations. These, with the other arrangements described, have been designed with a view of making the buildings a home for research.

The building is in every way thoroughly up-to-date, and in the extent of window light for the laboratories, it is unique on this continent.

TORONTO UNIVERSITY MEDICAL FACULTY ON DR. RODDICK'S BILL.

At the annual meeting of the Medical Faculty of the University of Toronto the following statement was agreed to as embodying the views of the faculty upon Dr. Roddick's bill providing for Provincial reciprocity in connection with medical registration, and upon the proposed alteration in that bill suggested by the Montreal Medical Society:

The Medical Faculty of the University of Toronto desire to call attention to some recent developments in the matter of Dominion medical registration which may, if allowed to proceed further without opposition, result in prejudicing the course of medical education in this Province.

As is well known, Dr. Roddick, after several years of effort, succeeded in persuading the Dominion Parliament to pass an Act providing for the establishment of a Dominion Medical Council empowered to hold examinations in medicine, and to give licenses to practise which shall be valid in any portion of the Dominion. This Council can, however, be constituted only when all the Provinces of Canada have accepted the provisions of the Act.

The Act was passed in 1902, and since then all the Provinces, with the exception of that of Quebec only, have expressed their acceptance of it, and have taken the steps necessary to give their acceptance effect. In the case of Quebec a bill providing for the adoption of the Act was defeated in the Legislature on the 15th April, and the explanation advanced for this action is that the medical profession in one of the universities of that Province are unable to accept the Act as it stands, and that this has influenced the attitude of the Legislative Council and Assembly.

It will be recalled that before the Act received the sanction of Parliament there were several clauses in it in regard to which considerable discussion obtained on the part of the representatives of the various institutions interested in medical education. One of these was that dealing with the privileges to be accorded to the holders of university degrees. According to sections 3972 and 3977 of the revised statutes, rules and regulations of the College of Physicians and Surgeons of the Province of Quebec, graduates in medicine of Laval University, McGill University, and the University of Bishop's College, who have passed four years in the study of medicine, are entitled, without further examination as to their knowledge and skill, to the license to practise medicine in the Province of Quebec, and graduates in medicine of the University of Manitoba are given like standing in that Province, but all who wish to obtain a license to practise in Ontario, must undergo the examinations conducted under the authority of the Medical Council of this Province, whether they are graduates of a university or not. In order to prevent unjust discrimination between the universities of Quebec, on the one hand, and those of Ontario on the other, the representatives of the latter obtained the insertion in the Act of clause 3, sub-section 1, section 10, which reads as follows:

"The possession of a Canadian university degree alone, or of a certificate of provincial registration, founded on such possession, obtained subsequent to the date when this Act shall have become operative, as provided in sub-section 3 of section 6 hereof, shall not entitle the possessor thereof to be registered under this Act."

The representatives of the Ontario universities were told when they suggested this clause that it would make it impossible for the Province of Quebec to accept the Act, and interest is given this

statement by the fact that it is this clause which has been in large part the cause of the refusal of that Province to pass the legislation required to make the Act operative.

One of the recent developments referred to is the agitation which has arisen in the medical profession in the Lower Provinces for amendments to the Act. The question was brought before the Montreal Medical Society several months ago, and on March 31st last the report from the Special Committee appointed to deal with the subject, was laid before the society, and, after some discussion, adopted. A portion of the report was published in the Montreal press of the following day, and it would appear from this that inter-provincial registration without the intervention of a Dominion Medical Council was favored as the proper solution, but if such reciprocity between the Provinces in the matter of medical registration could not be brought about, Federal legislation embodying amendments to the Roddick Act should be obtained.

"We submit," says the report, "that the bill is neither desirable nor possible in its present form. We submit, however, that the Roddick bill, as here amended, will meet with the desired results and safeguard the general and special interests of the Province in matters pertaining to superior and secondary education."

The following are the amendments suggested to the measure:

"1. The Province will name a certain number of representatives, selected either from amongst the doctors, the members of the College of Physicians, or from the duly recognized universities.

"2. These members to the number of forty, more or less, will constitute a Federal Board, which will have power to order an examination, and to deliver a Federal license, which will be recognized by each of the Provinces, on payment by the candidate of the provincial local license.

"3. Only these will be admitted to pass their examinations who are licensed doctors in one of the Provinces of the Dominion, or a licentiate of a foreign university, duly recognized by the laws of their respective countries.

"4. The medical students, duly inscribed by virtue of provincial laws, at the moment the laws comes into force, cannot be questioned upon other matters than those taught them in the schools or universities prior to this law."

All the amendments suggested deal with important sections of the Act on the basis of which the Roddick bill, before it became law, was accepted in this Province, and it would appear, therefore, as if the whole question is to be again opened and brought before the various bodies interested. This, perhaps, is an advantage, because, as the Act at present stands, it is inoperative so long as Quebec objects to it, and a renewal of the discussion may

in the end lead to its acceptance in quite its present form on the part of the Province, or prepare the way for bringing it into operation so far as the other Provinces alone are concerned. As pointed out, the great difficulty on the part of Quebec is the desire of its universities, or, at least one of them, to extend over the whole Dominion its prerogatives, which at present are confined to that Province. In other words, they would give the holder of a Quebec University degree in medicine the right, without further examination, to practise medicine anywhere in the Dominion. That is the meaning of the proposal regarding inter-provincial registration without the constitution of a Dominion Medical Council, and to state it in this way is to dispose of it.

It is, however, in regard to the third of the suggested amendments that particular attention is desired. It would provide that a graduate in medicine of any one of the three universities of Quebec would, after registration in the College of Physicians and Surgeons of that Province, be entitled to proceed at once to take the examinations of the Dominion Medical Council, while graduates in medicine of other universities, that of Manitoba excepted, would be allowed to take the same examinations only after they had passed the examinations of a Provincial Medical Council. The reason for this proposal is that furnished in a leading article, apparently inspired, in a Montreal newspaper of April 1st, which states that this suggested amendment aims at preserving to the universities of Quebec the privileges they now enjoy, and of which the Roddick Act would deprive them !

If this amendment should be adopted it would impose on every medical student in a university of Ontario three series of examinations, one for his degree, one for his provincial license, and the third for that of the Dominion, while the student of Laval, McGill or Bishop's College would have to undergo two, the first and the last. This would involve a very serious discrimination in favor of the Quebec universities, and it would result in compelling the student in an Ontario university to spend about two months out of every session of eight months in undergoing medical examinations. To escape the burden and the number of these, all in this Province proposing to study medicine would go to the medical teaching institutions of Quebec. This would not, it is certain, make for an elevation of the medical standard.

It is obvious, therefore, that the suggested amendment cannot be accepted in Ontario. This being so, what can be done to bring the Act into operation ?

It is possible that after further agitation the representatives of the profession in Quebec may be led to see that the Act, as it now stands, offers fewer difficulties for all the Provinces than it would with amendments such as those suggested, but, failing that, there are two other solutions, one of which would bring the Roddick

Act into operation, but not so far as Quebec is concerned, the universities and profession of that Province in that case having no representation in the Council under the Act. The other, and, perhaps, the more practicable, solution would provide that all students of the universities of Quebec, as demanded, by the Montreal Medical Society, should be required, as heretofore, to obtain the license to practise in that Province before being allowed to present themselves for the examinations of the Dominion Medical Council, but that those of the universities of the other Provinces should be permitted to proceed directly to the same examinations, while, further, all students, after passing the required Dominion examinations, should be allowed the license to practise medicine in any Province on the payment of the provincial registration fees.

The first solution would have one disadvantage. It would not bring about reciprocity in medical registration with the other parts of the empire, but this would be greatly outweighed by the advantage of having one licensing body only for all the Provinces except Quebec.

The second solution offered would preserve for the universities of Quebec their privileges in that Province, while it would not work such injury to the universities of Ontario as the alteration of the Roddick Act proposed by the Montreal Medical Society would inflict.

WHY DR. RODDICK'S BILL WAS REJECTED AT QUEBEC.

THE defeat of the Quebec bill for the adoption of the Roddick Act was so far a foregone conclusion, that it caused no comment among the medical profession of Montreal. The large element who favor Dominion registration are inclined to regret the rather characteristic turn taken by the discussion on the second reading, but otherwise they feel that the cause did as well as could be expected.

Dr. E. P. Lachapelle, head of the Provincial Board of Health, and one of Dr. Roddick's chief supporters, said that the work of educating Quebec up to the Act was progressing, and he hoped that the result would be achieved after one or two more such fights. There were some minor defects in the Roddick Act as adopted by the Commons, which, if removed at Ottawa this or next session, would somewhat facilitate adoption at Quebec.

It is generally admitted that the inter-provincial registration scheme devised by the Montreal Medical Council, and boomed by numerous professional organizations in the Province, had no further object than the killing of the Roddick Act. In operation, it would have no further effect than to simplify slightly the cumbersome mechanism of taking out a diploma by an already qualified

man who has moved into a new Province. It leaves the provincial examination system standing, and the most brilliant professor of a Toronto medical college could not practise in Quebec without writing examination papers for a board of the Quebec College of Physicians and Surgeons.

Moreover, it would fail entirely to attain one of the chief ends of the Roddick Act—imperial recognition of Canadian licenses. The legal standing and professional value of the license to practise given by each Province would not be affected in the slightest.

It is, therefore, exceedingly doubtful whether inter-provincial registration will be heard of again until it becomes again necessary to head off the Roddick Act; and by that time the extreme hollowness of the device will be generally apparent. The real "defect in the Roddick bill," which caused its defeat at Quebec, is quite inherent in the nature of the proposal, and lies in the fact that it interferes—or will interfere by Quebec's own consent when adopted—with the existing rights of Provincial control of the standard of qualification. That such interference was contemplated even by those who brought about Confederation is shown by the fact that the regulation of the medical profession appears in the Quebec resolutions preceding the B. N. A. Act among the functions of the Dominion.

One Quebec suggestion for amendment of the Roddick Act in detail is probably worth considering, and its acceptance would do much to popularize the measure here. We are less basely utilitarian than our sister Provinces, and demand more "culture" of our doctors. Therefore, we object to the proposed high school arts qualification instead of our own "classical college" standing. But the difference is not vast.—*Quebec Exchange*.

THE JUST DESERTS OF THE SUBSTITUTORS.

THE following is the final decree of the Circuit Court of the United States, District of Massachusetts, and dated July 16th, 1902, in the case Fairchild Bros. & Foster vs. Walter L. Conwell, and which will be found full of interest to all physicians who realize more and more what injustice is done to their patients, as well as themselves, by druggists who resort to substitution:

Colt, J.—The above cause came on to be heard at this term upon the motion of the complainant to take for confessed the bill of complaint filed therein, and it appearing that the complainant filed its bill of complaint on the second day of May, 1902, against the defendant, Walter L. Conwell, and that process of subpoena issued ordering the defendant to appear June 2nd, 1902, and answer said bill on or before the first Monday of July, 1902, and was duly served upon the defendant and return made thereon, and

that the defendant has not appeared to plead answer or demur to said bill of complaint, but has confessed judgment in said action, and it appearing that this court has jurisdiction of the subject matter and of the parties hereto, it is hereby ordered, adjudged and decreed that the said bill of complaint and the allegations therein contained are taken as confessed against the defendant, Walter L. Conwell, and that said allegations are true; and thereupon it is ordered, adjudged and decreed as follows:

That among the pharmaceutical preparations manufactured and sold by the complainant is a certain preparation called by it "Fairchild's Essence of Pepsine," and is commonly known among physicians and druggists as "Fairchild Bros. & Foster's Essence of Pepsine," or "F. B. & F.'s Essence of Pepsine," or "Essence of Pepsine (Fairchild)," by which name it is, and for many years last past has been, distinguished from all other pharmaceutical preparations;

That the complainant has the sole right to make use of the name of "Fairchild" in connection with the term "Essence of Pepsine" as a trade name in connection with the sale of any and all preparations, and especially in connection with the sale of any preparation which might otherwise be designated as "Essence of Pepsine;"

That the defendant, Walter L. Conwell, is, and for some time past has been, conducting a retail drug store and prescription pharmacy at No. 210 Shawmut Avenue, in the City of Boston, in the State of Massachusetts;

That prior to the date of said bill of complaint the defendant, Walter L. Conwell, by himself, and by the clerks and attendants employed by him and working under his direction and superintendence, knowingly dispensed and sold at the said drug store, in instances where "Fairchild's Essence of Pepsine" was specifically designated in physicians' prescriptions brought to said drug store to be filled, preparations markedly different in chemical compositions from "Fairchild's Essence of Pepsine," and inferior thereto, and which were never made or sold by Fairchild Bros. & Foster;

That the said acts of the defendant, Walter L. Conwell, his agents and employees, are in violation of the complainant's rights, and are unlawful and contrary to equity, and fraudulent upon the public;

It is therefore ordered, adjudged and decreed that the defendant, Walter L. Conwell, his agents, servants and employees be, and they hereby are, perpetually enjoined from selling or dispensing either at the drug store of the said Walter L. Conwell, at No. 210 Shawmut Avenue, in the City of Boston, or elsewhere, any "Essence of Pepsine" or pharmaceutical preparation of any sort or kind whatsoever not manufactured by Fairchild Bros. & Foster,

in imitation of or in substitution for "Fairchild's Essence of Pepsine" whenever "Fairchild's Essence of Pepsine" is prescribed or asked for, and that they be, and hereby are, perpetually enjoined from representing by any word or action that any preparation sold by the said defendant not manufactured by Fairchild Bros. & Foster is "Fairchild's Essence of Pepsine."

It is further ordered that a writ of injunction restraining the defendant as above set forth issue forthwith.

It is further ordered, adjudged and decreed that the defendant pay to the complainant the costs of this suit to be taxed by the clerk of said court, and that execution issue therefor according to the rules and practice of this court.

ITEMS OF INTEREST.

Polk's Medical Register.—The eighth revised edition of this well-known work is now under way, and will appear in due time. Send for descriptive circulars, and do not be deceived by imitators. Polk's Medical Register and Directory has been established sixteen years. R. L. Polk & Co., Publishers, Detroit, Mich.

A Woman Ship Doctor.—According to a British weekly journal, a Mlle. Sarah Broido, a young woman physician, has obtained an engagement as ship's doctor on board a steamer plying between Marseilles and Algiers. Mlle. Broido is the first French medical woman who has been employed in such a capacity.—*Medical Record.*

New Surgeon-Lieutenants.—The undermentioned have passed proficiency examinations for the medical service, and are qualified for the rank of surgeon-lieutenant or captain; Surgeon-Lieut. W. A. Henderson, 27th Regiment, Surgeon-Lieut. J. W. Shaw, 33rd; Surgeon-Lieut. R. G. McDonald, A.M.S.; D. Hutcheon, M.D., H. H. Sinclair, M.D.

A Temperance Hospital for Chicago.—A hospital to cost \$75,000 is to be erected in Chicago, the physicians of which must use no alcohol in their prescriptions. The hospital will be called the Frances E. Willard National Temperance Hospital. The three schools of practice—regular, homeopathic, and eclectic—will be represented on the medical staff.—*Medical Record.*

Death of First Woman Physician—Dr. Emily R. Robbins, who is said to have been the first woman medical practitioner in the United States died in Philadelphia, August 31st, aged seventy-one years. Dr. Robbins was born in Philadelphia, of Quaker parents, and graduated in 1857. She practised for a time at Fort Madison, Iowa, afterward marrying a classmate. At the begin-

ning of the Rebellion, Dr. Robbins and her husband came to Philadelphia, where, during the war, she devoted most of her time to the wounded soldiers who were brought to the various hospitals there.

Mont Blanc Place for Consumptives.—Prominent French physicians are now turning their attention to Mont Blanc and the Mer de Glace as possible sites for consumptive sanatoriums. Dr. Kass, director of the Paris Municipal Sanatorium, took a number of pauper consumptives to the Mont Blanc Observatory this week to study the effects produced upon them during the month. Dr. Bayeux, of the Saint-Lazare Infirmary, is carrying out similar investigations on the Mer de Glace, and has expressed the opinion that the disease can be coped with, and perhaps cured, by proper treatment there.

A Bed-making Contest.—At Binghamton, N.Y., twelve women nurses in uniform, caps and aprons, took part in a bed-making contest at the Binghamton Hospital field recently. Six beds were spread out in line on the tennis court with the bedding lying on the side of each. The contestants had to start from the opposite end of the tennis court, race to the beds, make them, and race back to the starting-point. The pillows had to be put inside the cases. Miss Elizabeth Holmes was the winner, and received the prize of \$2. Her time was two minutes and 19 seconds. Miss Sadie Webster won second prize.—*N. Y. World.*

Physicians' Book-keeping.—It is a well-known fact that book-keeping to the average physician is his *bête noir* and that professional men would be far better off financially if they paid a little more attention to the business side of practice. Nowadays it costs a mere bagatelle to employ someone to keep the books written up and accounts rendered, as they should be, once a month, especially when results are looked at. A practical accountant, with the best of references and long experience, wishes to make arrangements with physicians to keep their books and render their accounts, in the evenings. His terms are very moderate and he solicits a personal interview. Those interested address, "Accountant," Box 71, CANADIAN JOURNAL OF MEDICINE AND SURGERY, TORONTO.

Longevity of Ministers.—It is the universal testimony that clergymen reach the highest age, being close run by gardeners and vine dressers. Ordinary agricultural laborers, although their occupation is so largely in the open air, are not conspicuous as long livers, except in France, Sweden, and England. People working with wood are longer lived than those whose occupations are with metals, and both attain a higher age than textile workers and workers in chemical industries. The shortest lived people are miners, except in England, where the superior mining regula-

tions and admirable sanitary arrangements have a beneficial effect. In England and Norway sailors and fishermen live to a far greater age than in Germany and France.—*Medical News.*

The Canadian Medical Exchange.—We draw the attention of physicians who may desire to sell their practices, or those who may wish to buy a medical practice, to the Canadian Medical Exchange. Dr. Hamill has been conducting this important department of medical affairs for the last ten years, and from close knowledge of his method of doing business, we can strongly recommend him to the confidence of the profession, and advise any of our readers who may have any business in this line, to place it in Dr. Hamill's hands, with the full assurance that the utmost business ability, integrity, and professional secrecy, will be utilized. We have examined his method of doing business, and must admit that he has systematized it to perfection, so as to meet the wants of the profession most fully.

Pathology as Seen in Works of Art.—Dr. Paul Richter, the recently-appointed professor of anatomy in the Paris Ecole des Beaux-Arts, was formerly an assistant of the eminent specialist in nervous disorders, Professor Charcot, at the Salpetriere. For him he made a number of sketches demonstrating hysterical symptoms. While doing this work he was led to adopt the maxim that there can be no perfect beauty without perfect health. He noted pathological features in many well-known works of art, and concluded that faulty models were responsible. He accordingly advises his pupils to avoid the usual atelier models, and seek for the lines of human beauty among the acrobats in the circus, the blacksmiths, and the partially nude laborers at the docks and in the fields. "Beauty in action" is his motto.

The Bacillus in War.—The Macedonian revolutionists, it is reported, threaten, in case they cannot bring about a war between Turkey and Bulgaria, or induce European intervention, to decimate the population of the Macedonian cities controlled by the Turks by poisoning the wells with the bacilli of the plague. This is really a formidable threat, easy of execution, terrible in its consequences, and picturesquely barbarous. The plague bacilli can be put up in soluble capsules of small size, and might be dropped into wells without attracting any attention. From the point of view of the advantage of the human race it is not certain that the depopulation of this part of the world by pathogenic bacteria would be an unmixed misfortune, but this consideration in no wise mitigates the fiendishness of the crime of planting the seeds of a subtle and uncontrollable infection in soil where it would linger for years, with almost inevitably fatal consequences to all.—*Medical News.*

San Francisco's Chinatown Threatened.—A report from Washington says that officials of the Public Health and Marine Hospital Service are in consultation with representatives of the business men of San Francisco in regard to a proposition to abolish Chinatown. It is believed that the seeds of plague are kept alive there, and the existence of the quarter thus presents a constant menace to the health of the city. The attempt to stamp out the disease there has been only partly successful, although the most rigid sanitary measures have been practised. Several months ago Mexico and Ecuador declared a quarantine against San Francisco, and the national conference of State board of health officials condemned the hygienic conditions of Chinatown, and publicly deplored the danger of a spread of the plague to other States. It is believed by many of those most competent to judge that the situation cannot be permanently improved unless Chinatown is abolished.—*Medical Record.*

Second Greatest Medical Library in the World.—In an interesting article contributed to the *Public Ledger* of Philadelphia, by Dr. Frederick P. Henry, honorary librarian of the College of Physicians, it appears that the second greatest medical library in the world is possessed and controlled by the College of Physicians of Philadelphia, the largest being that of the Surgeon-General's Office in Washington, D.C. The College of Physicians dates its birth from the minutes of the first meeting, which was January 2nd, 1787. At the last enumeration there were 67,243 volumes in its enormous collection. The library is not only open to every one, whether physician or layman, for consultation, but the Fellows have the privilege of taking one book to the number of "1 folio, or quarto, or 3 octavos, duodecimo, or bound periodicals" for a period of two weeks, and exceeding the time if the book has not in the meantime been asked for, for two weeks more. There is only one restriction with reference to non-members, namely, that they must present a card or note of introduction to the librarian from one of the Fellows of the College.—*American Medicine.*

Asepsis at the Soda Fountain.—The movement by the Board of Health to enforce more perfect cleanliness in barber shops is wholly commendable, and no objection has been met except among the most ignorant. The same authority might be advantageously exercised over the popular soda fountains and its utensils. In one of the largest retail drug stores in New York, where the sale of soda water is made a specialty, dirty glasses removed from the counter were placed beneath a faucet of running water and shaken for a few seconds, then refilled with soda water for the next customer. Even in one's own home, where the danger of infection

is, to a certain extent, a known quantity, one insists upon having the glasses that are removed from the dinner table at least washed with soap and hot water. How much more should similar cleanliness be observed in a place frequented by the general public. The simple immersion of the glasses in an antiseptic solution, which should not be scarce in a drug store, for five minutes, and subsequent rinsing with plain water, would remove all danger, and would assure the customer that he was getting nothing with his soda that he had not paid for.—*Medical News, N.Y.*

Hydrotherapy at St. Catharines.—May we not conclude that much of the beauty of the Roman women and the prowess of Roman warriors was due to the national custom of bathing, which became such an important part in the daily economy of Roman life? The use of tonic waters has long been known, and springs of many kinds now tempt the afflicted ones. It is no longer necessary to go to Germany or Switzerland, as waters quite as curative are found scattered over America. The tonic influence of sea bathing is well known, and in St. Catharines, Ontario, are found springs denser than sea water, while clear and sparkling in appearance; heated to a temperature varying with the condition and ailment of the patient, the water is drawn into porcelain tubs in which the patient is immersed, and while therein rubbed and massaged, then placed in blankets and put to rest on a couch, this treatment is combined with electricity, massage and rest. The whole process is in charge of a physician. Not only is the particular ailment benefited, but the whole system is toned and invigorated in a natural way. There are many attractive points in the neighborhood, and at "The Welland" will be found all the comforts of a first-class hotel, sun parlor, roof promenade, library, and music rooms. Long distance phones in each room. For information apply Malcolmson Bros., St. Catharines, Ontario, or Grand Trunk Railway Agents.

Messrs. Howards & Sons, of Stratford, near London.—Messrs. Howards & Sons inform us that they have entrusted to Mr. Edmund White, B.Sc., F.I.C., the management of that branch of their business dealing with the manufacture of fine chemicals, and carried on under the style of Hopkin & Williams, of Cross Street, Hatton Garden, E.C., which until recently was under the management of the late H. C. Everson, F.I.C. Messrs. Hopkin & Williams have a newly built and equipped factory at Ilford, where the laboratories afford ample scope for research work in chemical technology, and extension of business under Mr. White's direction. Mr. White, who is a Bachelor of Science of London University, and a Fellow of the Institute of Chemistry, was formerly Bell Scholar in the Pharmaceutical Society's

School, acting afterwards as demonstrator in the chemical laboratories at Bloomsbury Square. For the last fourteen years he has been in charge of the pharmaceutical department at St. Thomas's Hospital, where he has carried out original work dealing with pharmaceutical chemistry, one of the latest contributions from his laboratory being the solution of the time-honored kino-gelatinization problem. Mr. White is also well known as joint-author of "Pharmacopeia," and as the compiler of the last edition of the "St. Thomas's Hospital Pharmacopeia. At the recent Bristol meeting of the British Pharmaceutical Conference, he was appointed one of the honorary general secretaries, to fill the vacancy caused by the retirement of M^r. F. Ranson.

Raised the Hospital Fees.—Dr. Sheard has instituted a radical reform in connection with the charging of fees for medical attendance to patients attending the Isolation Hospital. Up till some weeks ago those patients who could afford to pay were charged 40c. a day, the same as in other hospitals, but the doctor discovered that this was not working satisfactorily, as many quite able to pay more liberally for their treatment were paying very little. He therefore raised the fee to \$1 a day to patients in public wards, and \$2 a day to patients in private wards, and in diphtheria cases patients must pay for their own antitoxine at the rate of \$1.50 per 1,000 units. Since this rule was put in force the revenue to the hospital has been about \$75 a week, and is much more satisfactory than the other arrangement. When the patients are too poor to pay any fee they must be certified to by the City Relief Officer within one week after they enter the hospital. This the doctor thinks will prevent the city being held up by impostors. Dr. Sheard is considering a plan by which the Isolation Hospital may be made of use educationally to the medical profession of the city and Province. His idea is that a certain number of final year medical students might be allowed to attend the hospital and see the cases. We feel that the Board of Health will not object to such an arrangement. At present, students have no opportunity of becoming acquainted with contagious cases, and become practising physicians sometimes without having seen a case of scarlet fever or diphtheria. The change would result in great benefit to both the profession and the public.

A Memorial to Major Reed.—On August 15th, a meeting was held in Bar Harbor of friends of the late Major Reed, M.D., U.S.A., to whom in a large degree is due the discovery of the mode by which yellow fever has been spread, and the consequent suppression of that dire disease. Representative men were present from different parts of the country, and letters were received from various members of committees already appointed to pro-

note the collection of a memorial fund in grateful commemoration of Dr. Reed's services. Important suggestions were presented from President Eliot, Dr. W. W. Keen, Professor J. W. Mallet, and others. Dr. Daniel C. Gilman, chairman of a committee appointed by the American Association for the Advancement of Science, presided, and Dr. Stuart Paten acted as Secretary. Among those who took part in the conference were Dr. W. H. Welch, of Baltimore, Dr. Janeway, of New York, Dr. Abbott, of Philadelphia, Dr. Herter, of New York, Dr. Barker, of Chicago, Dr. Putnam, of Buffalo; Dr. Fremont Smith, of Bar Harbor, and Dr. Sajous, of Philadelphia; and besides these medical gentlemen, Bishop Lawrence, of Massachusetts, and Messrs. Morris K. Jesup, President of the New York Chamber of Commerce, John S. Kennedy, President of the Presbyterian Hospital of New York, and William J. Schieffelin, of New York. The following conclusions were reached: that an effort should be made to raise a memorial fund of \$25,000 or more, the income to be given to the widow and daughter of Dr. Reed, and after their decease the principal to be appropriated either for the promotion of researches in Dr. Reed's special field, or to the erection of a memorial in his honor at Washington. Arrangements were made for the publication of circulars explaining this movement, and asking co-operation not only from the medical profession, but from all liberally disposed individuals who appreciate the value of Dr. Reed's services to mankind.—*The Outlook.*

"The Law and the Doctor."—Amid the multiplicity of his daily duties, the physician has but scant time to cultivate more than a passing acquaintance with the collateral branches of his profession; the average practitioner, therefore, knows but little of the legal aspect of his relations to the body politic, or his rights and privileges, or his liabilities and responsibilities to his patients and the community at large. While pursuing "the even tenor" of his professional way, the doctor may suddenly be confronted with a summons and complaint in an action for malpractice, or may be called as an expert witness in a similar suit against a colleague. While it is not our intention to urge the physician to become his own lawyer, we believe he should acquaint himself with the fundamental principles of medical jurisprudence, so that he may be reasonably well prepared to defend his own or his brother physician's rights and privileges on the witness stand. With a view of placing such information at the immediate disposal of the doctor, the Arlington Chemical Co. has arranged to issue, under the title "The Law and the Doctor," two 48-page booklets, which shall present in condensed form and succinct style, an epitome of the essentially important features of (1) "The Civil Liability of the Physician for Malpractice," and (2) "The Physician as a Wit-

ness." These exceedingly practical monographs have been expressly prepared by an eminent member of the New York bar, who is well recognized by the legal profession as an expert in this special branch of practice. The first of these reference text manuals is now ready for distribution, and after a reasonable interval will be followed by the second monograph. Copies may be had by applying to the above company.

A "Doctor's Sign."—The following sign of a quack "doctor" appears in Chattanooga, Tenn. :

DR. C. H.

FAITH HEALER.

Drink 3 glasses of water, wash my hands.

Blow my breath on him & heal him.

Cures Spells & Drives out Bad Spirits.

Diseases of all kind male and female

Cured & will tell you the cause of sickness.

Coal and Wood

sold

Lunches of all kinds

and Confectionery.

There are, we are sorry to say, ill-natured persons who speak of the surgeon as "the butcher." Surely this gentleman keeps a veritable "delicatessen" of medicine. But even this simple little idyll has its pathetic side. We learn with regret that several prominent members of the county medical society, engaged in the suppression of illegal practice, were found recently in a state of hysterical melancholia, gazing on the sign and dejectedly wailing in antiphon—

When the enterprising healer's not a healing,
 When the doctor is'nt "cussing spirits good,"
 He loves to do a bit of honest dealing,
 And drive a thriving trade in coal and wood,

not a healing,
 spirits good,
 honest dealing,
 coal and wood.

When the curist ain't a curing of a brother,
 He loves to deal in candy, cake and bun,
 Taking one consideration with another,
 A physician's lot is not a happy one,

of a brother,
 cake and bun,
 with another,
 happy one.

(Ensemble) Oh,
 When quackery suppression's to be done,
 A physician's lot is not a happy one,

to be done,
 happy one.

(basso profundo)

—New York Medical Journal.

Correspondence.

The Editor cannot hold himself responsible for any views expressed in this Department.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY:

DEAR SIR,—My attention has been drawn to a paragraph in the organ of the anti-vaccinationists, published in London, England, containing a report from *The Toronto News*, of a meeting at Toronto Junction, at which one Dr. Richardson had said that he had formerly believed in vaccination, but later experience had led him to change his opinion.

I immediately wrote to the *News*, stating that it was to be regretted that there was no indication which of the many Drs. Richardson who reside in Toronto or its vicinity it was who had expressed this opinion. As to myself, I utterly repudiated it. As reason for my confidence in the protective power of vaccination, I gave my experience of fifty-six years, during the first half of which I attended numerous cases of small-pox at private residences, before there was any isolation hospital or any effective antiseptic, without the disease spreading in a single case to other members of the families, or to the attendants, or to the members of my own large family.

The crucial test would be for a doctor, who had never been vaccinated or had small-pox, to attend daily in immediate contact with malignant small-pox, perform all the duties necessary, and return daily to a large family, none of whom were protected by vaccination or previous attack.

I doubt very much whether any one of those who talk so glibly against vaccination, would be courageous enough to apply such a test.

I concluded by expressing my firm belief that universal, typical vaccination, repeated until it ceased to take effect, would cause small-pox to utterly disappear from the face of the earth. I take this opportunity, at the risk of being called an old fogey, to express the doubt whether we have gained by discarding human, and resorting to bovine lymph. It was undoubtedly true that there was a degree of risk lest lymph might be used which was contaminated by other diseases, but, with due care, and complete knowledge of the source of the vaccine, the risk was reduced to a minimum. During my experience in a large family practice I never saw any untoward result, except in one case where slight erysipelas followed, caused, no doubt, by having used a perfectly new lancet, without using the precautions which antiseptics has since shown to be necessary.

Vaccination, then, was performed with the utmost care. In a large family practice one had abundant opportunity of selecting proper subjects from which to preserve lymph. The health of the child, and of its parents, was well known. No lymph was taken from a vesicle which had not seen a perfectly typical course as to time, and did not present the typical appearance, nor had been accompanied or followed by suppurative or other abnormal processes.

The lymph was used either direct from arm to arm, on points, or more frequently by means of the dried vesicle, which was gently raised, enveloped in pure white wax, covered with foil. Kept in this way, it would retain its efficacy for a long time.

It may interest you to learn that the use of capillary tubes for vaccine virus, is not new. I have still the empty tubes which were used by me over forty years ago. Revaccination was always tried wherever there was any special risk of exposure. Whenever I had to attend a case of small-pox, I vaccinated myself again, and all my family, but it never took except once, in the case of one of my children. When the use of bovine virus became imperative, the result for a long time was, in my opinion, very unsatisfactory. It could only be obtained from some one of the dozens of producers. It had to be used entirely on trust. My opportunities of judging as to its effects were limited, but what I did often see, filled me with amazement and regret.

The period of incubation was very irregular, generally much prolonged, the vesicles were often huge discolored blebs, the surrounding inflammation was excessive, and large, unhealthy ulcers were left which took a long time in healing.

The typical pearl or rose-leaf was rarely, if ever, seen. Whether this was due to ignorance, or carelessness, or whether the virus had to undergo many transmissions before it reached the Jennerian standard, which I think likely, I am not able to decide. Whether it was efficacious as a prophylactic or not, it assuredly was not free from obnoxious germs, and there are grounds for believing that some of it contained those of tetanus. During Jenner's life, vaccination ran great risks of being diseased, in consequence of the use of imperfect, or contaminated, virus, and I fear much of the antagonism of late years has arisen from the same cause.

I am glad to say that, during the past four or five years, I have seen virus furnished by large reliable establishments which, in every respect, complies with the Jennerian standard, and the future promises continuance. To ensure this, power should be vested in some duly qualified person, or board, with absolute authority to prohibit the sale of vaccine virus which, in any way, fails to reach the proper standard.

JAMES H. RICHARDSON.

36 St. Joseph Street. Toronto, September 14th, 1903.

The Physician's Library.

BOOK REVIEWS.

Text-Book of Anatomy. Edited by D. J. CUNNINGHAM, F.R.S., M.D. (Edin. et Dublin), D.Sc., LL.D. (Glasgow et St. Andrews), D.C.L. (Oxon.), Professor of Anatomy and Chirurgery, Trinity College, Dublin. Illustrated with 824 wood engravings from original drawings, many printed in colors. New York: Wm. Wood & Co. 1902 Canadian agents, Chandler & Massey Limited, Toronto and Montreal.

That the author is an old pupil of that master anatomist, Sir William Turner, of Edinburgh, almost necessarily places upon his work the stamp of professional approval and general acceptance in the world of science. On the fly leaf appears the following dedicatory notice: "To Sir William Turner, K.C.B., F.R.S., M.B., LL.D., D.C.L., D.Sc. in recognition of his eminence as an anatomist, and his influence as a teacher, this volume is dedicated by those of his former pupils and assistants, who have contributed to its pages."

All of the contributors, with one exception, are ex-assistants of Sir William Turner. They include such men as Dr. Ambrose Birmingham, now Professor of Anatomy, Catholic University School of Medicine, Dublin; Dr. D. J. Cunningham, the author; Dr. A. F. Dixon, Professor of Anatomy, University College, Cardiff; Dr. David Hepburn, Lecturer on Regional Anatomy, University of Edinburgh; Dr. Robt. Howden, Professor of Anatomy, University of Durham; Dr. A. M. Paterson, Professor of Anatomy, University College, Liverpool; Dr. Arthur Robinson, Professor of Anatomy, King's College, London; Dr. H. J. Stiles, Surgeon to the Royal Hospital for Sick Children, Edinburgh; Dr. Arthur Thomson, Professor of Human Anatomy, University of Oxford; and Dr. A. H. Young, Professor of Anatomy, Owen's College, Manchester.

The work is divided into the following sections: (1) General Embryology; (2) Osteology; (3) Articulations, or Joints; (4) Muscular System; (5) Nervous System; (6) Organs of Sense and the Integument; (7) Vascular System; (8) Respiratory System; (9) Digestive System; (10) Urogenital System; (11) Ductless Glands; and (12) Surface and Surgical Anatomy. Of

the 824 illustrations throughout the book, there is not one that cannot be termed excellent. The colored plates deserve especial mention, and have been executed with every possible attention to anatomical detail.

The book covers about 1250 pages of text, and the type is large and distinct, a most important item in a work for constant reference.

The subject of the anatomy of the human body has been thoroughly covered in Dr. Cunningham's text-book, a work that is at least the equal of, if not in some respects superior to, even a Gray or a Morris.

W. A. Y.

International Clinics. A quarterly of illustrated clinical lectures and especially prepared original articles on treatment, medicine, surgery, neurology, pediatrics, obstetrics, gynecology, orthopedics, pathology, dermatology, ophthalmology, otology, rhinology, laryngology, hygiene, and other topics of interest to students and practitioners by leading members of the medical profession throughout the world. Edited by A. O. J. KELLY, A.M., M.D., Philadelphia, with the collaboration of Drs. W. Osler, J. H. Musser, Jns. Stewart, John B. Murphy, T. M. Rotch, John G. Clark, James J. Walsh, J. W. Ballantyne, John Harold, Edmund Landolt, Richard Kretz, with correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Vol. II., thirteenth series. 1903. Philadelphia: J. B. Lippincott Company. Canadian Agent: Chas Roberts, Montreal.

The first sixty-five pages of this popular book are devoted to articles by various writers on the summer diarrheas of children. There are six articles, all written by first-class men, and all of a most interesting character. Altogether they comprise not only a history of the condition, but the up-to-date statistics, pathology, treatment, and prevention. These alone would seem to be sufficient to recommend this volume to the busy practitioner, but there are many other and valuable papers in it which still more make it necessary that every medical man should have it in his library. The next fifty-eight pages are devoted to diseases of the pancreas, summed up in two papers, one by Eugene L. Opie, on "Symptoms and Diseases of the Pancreas," and the other by John B. Deaver and George P. Muller, on the "Diagnosis and Surgical Treatment of Diseases of the Pancreas." These are very valuable papers just now, coming as they do at a time when disease of this organ is attracting so much attention.

There are a number of papers on treatment, on medicine, surgery, pediatrics, and on the eye. Among the first there is an article on Truncceek's serum in arterio sclerosis, by Leopold Levy,

which deserves particular mention. In pediatrics, there is a paper by Dr. W. F. Hamilton, on cirrhosis of the liver in children, with notes on three cases. Altogether the volume is one which, apart from its excessively readable character, contains material of the greatest possible value to every practitioner.

A. J. J.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by ROBERT AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, of Philadelphia, etc., assisted by H. R. M. LANDIS, M.D., Assistant Physician to the Out-patient Medical Department of the Jefferson Medical College Hospital. Volume II., June, 1903, Surgery of the Abdomen, including Hernia, Gynecology, Disease of the Blood and Ductless Glands, the Hemorrhagic Diseases, Metabolic Diseases, Ophthalmology. Philadelphia and New York: Lea Bros & Co., 1903.

Volume II. of *Progressive Medicine* for the Current Year has amongst its contributors such well-known medical litterateurs as Drs. F. M. Crandall, of the N. Y. Polyclinic; W. B. Coley, of the College of Physicians and Surgeons, New York; Wm. Ewart, of St. George's Hospital; W. S. Gottheil, of the N. Y. School of Clinical Medicine; Albert B. Brubaker, of Jefferson Medical College; A. L. Turner, of Edinburgh; J. C. Hemmeter, of the University of Maryland, and Alfred Stengel, of the University of Pennsylvania. The volume is divided into four sections: Surgery of the Abdomen, including (1) Hernia, by Dr. W. B. Coley; (2) Gynecology, Dr. J. G. Clark; (3) Diseases of the Blood and Ductless Glands, the Hemorrhagic Diseases, and Metabolic Diseases, by Dr. Alfred Stengel; (4) Ophthalmology, by Dr. Edward Jackson. Volume II. for 1903 is, owing to its contents, perhaps, more suitable for the various specialists, and not as valuable as some preceding volumes have been to the general practitioner. It is, however, as a volume, fully up to any other of the series.

Aphorisms, Definitions, Reflections and Paradoxes: Medical, Surgical and Dietetic. By A. RABAGLIATI, M.A., M.D., F.R.C.S.Ed, late President of Leeds and West Riding Medico-Chirurgical Society; Honorary Gynecologist, late Senior Honorary Surgeon, Bradford Royal Infirmary; Consulting Surgeon, Bradford Children's Hospital, and St. Catherine's Home for Incurables. London: Bailliere, Tindall & Cox.

The author records his peculiar philosophy in a series of observations classified in the manner suggested by the title of the book. His philosophy consists mainly in the belief that most, if not all, the ills that flesh is heir to, come from indiscretion in

diet. He would preach the doctrine of monositeism as a safeguard against inroads of disease, or as a means of reducing the organism to a normal condition of health. In a volume of 282 pages, Dr. Rabagliati makes many statements which convince one that there is much to be said in support of his theory, but we do not consider that the conditions governing health and disease can be controlled solely by regulation of the diet.

Some of the teachings of the author are extremely interesting if not comforting; such as the following paragraph:

"458. Persons generally think that a fast continued for four, five, or six weeks would kill them; but it would not. Recurring attacks of illness, however, always tend to culminate in some more serious or fatal illness. Even if a-siteism for six weeks did prove fatal (which, however, it does not), the question is whether it would be preferable, if one must die, to die of fasting, or to die of disease. The latter is certainly much more painful."

There are many suggestive statements made by the author, which are undoubtedly the outcome of shrewd observation, and will be found both entertaining and instructive. There is much of good common sense to be found in the views recorded, and this makes the work of practical utility. We would therefore recommend the book to our readers, and we feel assured that everyone who reads it will find it well worth careful study.

A. P.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; one-time Clinical Professor of Diseases of Children in the University of Pennsylvania; Member of the Association of American Physicians, etc.; assisted by H. R. M. LANDIS, M.D., Assistant Physician to the Out-Patient Medical Department of the Jefferson Medical College Hospital. Volume III., September, 1903—Diseases of the Thorax and Its Viscera, including the Heart, Lungs, and Blood-Vessels; Dermatology and Syphilis; Diseases of the Nervous System; Obstetrics. Philadelphia and New York: Lea Bros. & Co. 1903.

Volume III. of this year's "Progressive Medicine" has a large staff of contributors, all men who stand quite high in the world of medical literature. They include such men as Dr. W. B. Coley, of New York; Dr. W. Ewart, of St. George's Hospital, London; Dr. W. S. Gottheil, Professor of Dermatology, N. Y. School of Clinical Medicine; Dr. A. P. Brubaker, of Jefferson Medical School; Dr. J. C. Hemmeter, of Baltimore; Dr. Alfred

Stengel, of the University of Pennsylvania; and Dr. A. L. Turner, of Edinburgh.

The most interesting section of Vol. III. is that from the pen of Dr. Gottheil, on "Skin Diseases and Syphilis." It covers seventy pages, and is well worthy of careful perusal. In dealing with the treatment of syphilis, the author gives in detail Leredde's method of injection, and shows that it is undoubtedly the method of the future, and the only means of introducing a definite amount of mercury into the system, with a definite result. Leredde advocates large doses, and says that the occurrence of stomatitis, though it should be avoided, depends largely upon the care that is given to the mouth. Tommasoli also energetically advocates the early and intense injection treatment. Von Düring uses salicylate of mercury for hypodermic injection, and though he has given 100,000 injections, had embolism but twice.

A *System of Physiologic Therapeutics*, a practical exposition of the methods, other than drug-giving, useful for the prevention of disease, and in the treatment of the sick, edited by SOLOMON SOLIS COHEN, A.M., M.D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College; Physician to Jefferson Medical College Hospital, to the Philadelphia Hospital, and to the Rush Hospital for Consumption, etc. Vol. X., Pneumo-therapy, including aerotherapy and inhalation methods, and Therapy, by DR. PAUL LOUIS TISSIER, one-time *interne* of the Paris Hospitals, Assistant Consulting Physician to Laennec and Lariboisiere Hospitals, Chief of Clinic in the Faculty of Medicine of the University of Paris. Illustrated. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1903. Canadian Agents: Chandler & Massey Limited, Toronto and Montreal.

Volume X. of this series is a particularly good one, and is a treatise on Pneumo and Aero Therapy and their development, with also the conclusions come to by those who have experimented as "to the effects and therapeutic application of condensed air and rarefied air—whether in caissons or pneumatic chambers, in balloon voyages or mountain ascensions, during sojourn at altitudes, or when various forms of differential apparatus are utilized." Part II. of this volume is devoted to "Inhalation Methods," giving the author's ideas of the therapeutic value of "the addition to air and to watery vapor of medicinal substances." It takes up in detail (1) the medicaments suitable for use as vapors; (2) the inhalation of fumes and vapors, with a discussion as to the various apparatus manufactured for the purpose; (3) the inhalation of gases; (4) the atomization of liquids and the inhalation of mineral waters at their source, and (5) the inhalation and insufflation of

powders (spirotherapy). Volume X. is thoroughly practical and gives a fund of information, which we don't think would be easily procurable elsewhere.

A Text-Book of Modern Materia Medica and Therapeutics. By A. A. STEVENS, A.M., M.D., Lecturer on Physical Diagnosis in the University of Pennsylvania; Physician to the Episcopal and St. Agnes Hospitals, Philadelphia. Third edition, greatly enlarged, rewritten and reset. Handsome octavo of 663 pages. W. B. Saunders & Co. 1903. Cloth, \$3.60 net. Canadian Agents: J. A. Carveth & Co., 413-415 Parliament Street, Toronto.

In getting the third edition of his text-book ready, Dr. Stevens has not simply revised it here and there, reproducing by far the larger part just as it was in the previous edition, but he has gone to work and entirely rewritten it, and now presents the profession with a new volume on new lines. He deserves congratulation on the result of his labors, as he has placed on the market a volume that is in many respects ahead of any other dealing with the same branch of medicine. It has been a habit in the past on the part of authors of works on materia medica and therapeutics to consider drugs in their alphabetical order; but Dr. Stevens, in the third edition of his admirable text-book, has wisely classified them according to their pharmacologic action. There are many who will criticise this method adversely; but we feel that it is a wise departure, in that it assists the reader to associate in his mind facts which otherwise he might have difficulty in remembering and putting into practice when treating disease. The last 125 pages of the book are devoted to applied therapeutics, and to the active practitioner, this section will be found exceedingly valuable and more than usually practical.

A. J. H.

A Text-book of Chemistry, for Students of Medicine, Pharmacy, and Dentistry. By EDWARD CURTIS HILL, M.S., M.D., Medical Analyst and Microscopist; Professor of Chemistry and Metallurgy in the Colorado College of Dental Surgery; Professor of Chemistry and Toxicology in the Denver and Gross College of Medicine, University of Denver. With 78 illustrations, including 9 full-page half-tone plates. Pages xii-523 crown octavo. Extra cloth, \$3, net, delivered. Philadelphia: F. A. Davis Company, Publishers, 1914-16 Cherry Street.

The author has taken a wide range of his subject. The first three hundred pages are devoted to physics, inorganic, organic, and analytic chemistry. The remaining two hundred deal with physiological, pathological, clinical, and sanitary chemistry and

toxicology. It is built up from lectures delivered in medical and dental schools during ten years. The author has gathered his material from many authorities, and has presented it in a very attractive manner. Facts follow each other so naturally, and formulas are used so freely, that drudgery is eliminated. It is written in a simple, concise, and interesting style, and is a book from which students could easily obtain a thorough grasp of the subject.

A. E.

Practical Handbook of the Pathology of the Skin. An Introduction to the Histology, Pathology, and Bacteriology of the Skin, with Special Reference to Technique. By J. M. H. MACLEOD, M.A., M.D., M.R.C.P., Assistant in the Dermatological Department, Charing Cross Hospital; Physician to the Skin Department, Victoria Hospital for Children. With eight colored and thirty-two black and white plates. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1903. Canadian agents: Chandler & Massey Limited, Toronto and Montreal.

This book comes to us as the outcome of many years of research and of accumulated knowledge. It is replete with the finer points in the histology of the skin, its pathological changes, its bacteriological flora, and technical methods applicable to its study. On these lines it is welcomed by us as a pioneer; to students of dermatology and clinicians it will fill a long-felt want. We notice that the skin-lesions have been considered on an anatomico-pathological basis, thus avoiding much of the confusion which at present exists in regard to the nomenclature of dermatology. The illustrations are accurate, being nearly all drawings from Dr. MacLeod's own specimens.

W. H. P.

Diseases of the Ear. A Text-book for Practitioners and Students of Medicine. By EDWARD BRADFORD DENCH, Ph.B., M.D., Professor of Diseases of the Ear in the University and Bellevue Hospital Medical College; Aural Surgeon, New York Eye and Ear Infirmary; Consulting Otologist to St. Luke's Hospital. Third edition, revised and enlarged. New York and London: D. Appleton & Company. 1903.

Of American text-books on the ear, Dench is perhaps the best known. For the aurist and the general practitioner as a book of reference it holds a place of its own. While one may not agree with Dench in all his views as to otological operations, still one must confess that he has given an impartial *resume* of current opinion on the subject. The greatest advance in otology has been the recognition of the close relationship of chronic suppuration

of the ear to diseased conditions of the brain and its coverings. This has necessitated the re-writing of the sections on chronic middle ear suppuration, sinus thrombosis, and brain abscess. The descriptions of these operations for the relief of these conditions are very complete, and illustrated by new plates made from the author's own sections. Altogether this edition is a distinct improvement on the last, and will add to the reputation of the author.

J. M.

A Pharmacopeia, or Diseases of the Skin. Containing concise formulæ for baths, mixtures, ointments, lotions, caustics; rules of diet, classification and therapeutical index. Edited by JAMES STARTIN, Senior Surgeon to the London Skin Hospital, Fitzroy Square. Fifth edition. Bristol: John Wright & Co. London: Simpkin & Co., Limited. 1903.

In this "vest-pocket" edition on skin pharmacopeia, we certainly have knowledge condensed, for within 64 diminutive pages we find numerous useful formulæ. Subjoined to each is a note of the uses to which it is practically applied. Many of them are being constantly used in the London Skin Hospital, Fitzroy Square. A section is devoted to rules on diet, so important in skin troubles. A condensed classification and a therapeutic index conclude what will prove handy to those too busy for deeper research.

W. H. P.

A Handbook of the Diseases of the Eye and Their Treatment. By HENRY R. SWANZY, A.M., M.B., F.R.C.S.I. Eighth edition. London: H. K. Lewis. 1903.

This favorite handbook has reached its eighth edition. Its popularity with students, for whom it is chiefly intended, is as great as ever. It is received with growing favor by practitioners who have once perused it, because of its readability, and the soundness of its teaching. The chief additions are descriptions of some rarer affections of the conjunctiva and cornea, and accounts of some lately devised operations, such as Maxwell's operation for shrunken socket. A very interesting paragraph is that on recurrent alviation of the cornea, or traumatic keratalgia.

J. M.

WE have to acknowledge the receipt of the Report of the Wellcome Physiological Research Laboratories. It contains some very valuable information about the various serums, their manufacture, standardization, uses and results, and will be found very useful to those interested in the subject. Walter Dowson, A.M., M.D., is the director.

W. J. W.